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ABSTRACT

Fifty-two families of students successful in public school and 40 families of students requiring alternative school programs completed self-report instruments on their perceptions of parent-adolescent communication and family functioning. The alternative school programs included residential and day treatment programs for adolescents with emotional difficulties, delinquency, poor school performance, discipline problems, or low self-esteem. Instruments used were the Family Adaptability and Cohesion Evaluation Scale III and the Parent Adolescent Communication Scale. The public school (PS) parents, adolescents, and families all reported their communications as more positive and open than did their alternative school (AS) counterparts. No significant differences were found between the two groups on adaptability. In the area of cohesion, however, there was a striking difference: 75% of the AS families described themselves as functioning in the disengaged interval compared to 19% of the PS families. There was significantly less discrepancy between the real and ideal cohesion measures for PS fathers, mothers, adolescents, and families than for their AS counterparts. It is concluded that the two assessment instruments successfully identified families where students are at risk for school failure, and that clinicians should consider the area of family cohesion and family communication as special goals in treatment plans. The appendices provide data tables, a bibliography, and instruments used in the research. (JDD)

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PARENT ADOLESCENT COMMUNICATION, FAMILY FUNCTIONING, AND SCHOOL PERFORMANCE

by

Venus Shirley Masselam

Dissertation submitted to the Faculty of the Graduate School
of The University of Maryland in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
1989

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ABSTRACT

Title of Dissertation: PARENT ADOLESCENT COMMUNICATION, FAMILY FUNCTIONING , AND SCHOOL PERFORMANCE

Venus Shirley Masselam, Doctor of Philosophy, 1989

Dissertation directed by: Robert Marcus, Professor, Department of Human Development

Parent adolescent perception of communication and family functioning was studied for students successful in public school and those with problems requiring an alternative school program. Fifty two Public School (PS) families and forty Alternative School (AS) families completed the PACS and FACES III self report instruments. The Circumplex model of Olson et al was used as the theoretical basis for interpreting the resulting data. PS parents, adolescents, and families all reported their communications as more positive and open than did their AS counterparts. The FACES III cohesion and adaptability subscales were analyzed in terms of family functioning. There was no significant difference between the two groups on the adaptability subscale. However there was a striking difference in the families perceptions of cohesion. Seventy five percent of the AS families described themselves as functioning in the disengaged interval compared to nineteen percent of the PS families. Because of this significantly more PS families were in the balanced level than were AS families. There was significantly less discrepancy between the real and ideal cohesion measures for PS fathers, mothers, adolescents and families than for their AS counterparts. The results of this study expand the knowledge base about the level of family functioning and communication which exist in families with adolescents who are successful in the traditional classroom setting and those who are not. These findings support the PACS and FACES III as valid instruments which can aid the professional in identifying families where students are at

risk for school failure. They demonstrate the importance of assessing family cohesion as a diagnostic component and suggest that clinicians should consider including improving family cohesion as well as communication as specific goals in treatment plans for students in alternative schools.

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CHAPTER I

Research Statement

Introduction

Recognition of problems in parent-adolescent communication is a societal issue. Treatment centers that work with adolescents and their families are confronted with the problem of communication on a daily basis. At one of these facilities, the Enterprise School, counselors frequently quote adolescents and their parents talking about their counseling group. "This is the only time that the family is together and talks to each other." The overriding public acknowledgment of this problem is consistently evidenced in daily newspapers.

Consider the following advertisement in the Sunday Washington Post Magazine Section on October 13, 1985. The bold eye-catching ad says "How to Get Your Teenager Talking to You." It goes on to offer a free book entitled Helping Youth Decide. The ad intimates that parents can help with the important decisions too many teens are making alone. The message is sponsored by the National Association of State Boards of Education and the Tobacco Institute.

A more dramatic example of problem communication between adolescent and parent is a published letter on the first page of the Outlook Section of the same newspaper entitled, "A Letter to My Son Who Killed Himself at the Age of 16." The letter was written by his mother, Marcia Scherago, a clinical social worker living in Northern Virginia with her remaining family. Mrs. Scherago indicated that she had been trying to make sense of her son's death for the past five years. The letter symbolized a desire for a dialogue with her adolescent son, a dialogue that did not happen while her son lived. In the letter she states, "But you never gave us or yourself the chance to pass through the

most difficult time in your life - adolescence." The letter is a dramatic example of a lack of ongoing open communication between adolescents and parents. These are only two examples of expressed daily concern.

The Fairfax County, Falls Church, and Fairfax City communities have recognized the problems facing adolescents and their families as well as the problems confronting the educators interested in academic achievement. The public school system has developed a suicide prevention program for the educators working with adolescents. Furthermore, the governing communities have supported and developed ongoing programs which present an alternative to the traditional public school for the high risk adolescent population, ages 13 to 19, who are experiencing problems in school. These programs and the population they serve, as well as the population in the public high schools are the direct concern of this proposal. A clear distinction between school groups, problem vs. nonproblem, is made in this study in order to consider to see if equally distinct family profiles would emerge.

Problem

This study is interested in understanding the applied as well as theoretical ramifications related to parent-adolescent communication. It is concerned with the recognized problems related to ineffective parent-adolescent communication such as suicide and potential school drop outs, and academic achievement. Families with troubled adolescents demand a great deal of their community's energy and financial support through special services.

While the adolescent stage of development is recognized and fairly well understood, the effects of this transitional stage in a family's life is less understood and studied. Furthermore, the changes in posture and communication at that time are even less known and understood. What are the patterns and challenges of communication

representative of adolescents as a group? If there are patterns what makes the difference in effective parent adolescent communication? Is a somewhat distorted and negative perception of communication characteristic of the adolescent's developing autonomy and self identity? If this is the case, perhaps greater stress results in the family when parents also view the communication negatively. Is it the combination of negative perceptions that create toxic family situations prevalent in families with problem adolescents?

So much is assumed about communication that the problem becomes one of sifting out and identifying what works in families at specific developmental stages. What are adequate techniques for studying the problem?

Purpose

The purpose of this study is to provide insight and understanding of parent-adolescent communication for professionals working with this special population as well as the families themselves. This study proposes to determine whether there are differences in communication and family functioning within (1) families with (problem) adolescents in Alternative Schools and Treatment as compared to (2) families with (nonproblem) adolescents in public schools and not in treatment. The study also tests the postulates of the Circumplex model developed by David H. Olson and his colleagues and the instruments they developed to measure the dimensions of the model. The hypotheses of this study are built upon the postulates of the Circumplex Model.

The theoretical basis for this study and a definition of relevant terms are described below. David H. Olson and colleagues, Candyce Russell and Douglas Sprenkle worked from 1979 until 1983 to develop the Circumplex Model of family functioning. This model offers a theoretical framework for assessing family functioning based upon written self reports from individual family members perception of the families behaviors and functioning.

There are three major dimensions constituting the Circumplex Model. These three dimensions, (1). Family Cohesion, (2). Family Adaptability and (3). Family Communication are defined and measured as follows:

(1) Family Cohesion: The emotional bonding that family members have toward one another.

Family Cohesion is measured on four levels ranging from a) disengaged (very low), b) separated (low to moderate), c) connected (moderate to high), d) enmeshed (very high). (See Figure 1.)

(2) Family Adaptability: The ability of a marital or family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress.

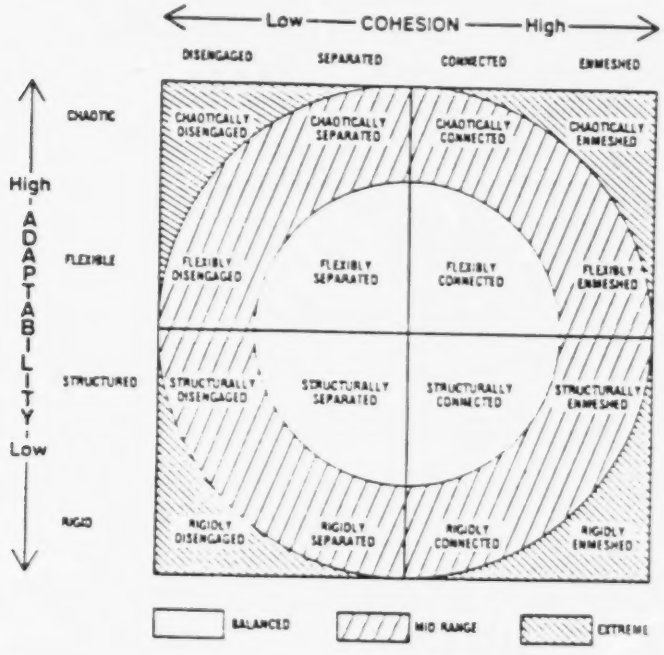
Family Adaptability is measured on four levels ranging from a) rigid (very low), b) structural (low to moderate, c) flexible (moderate to high), d) chaotic (very high). (See Figure 1.)

(3) Family Communication: The facilitating dimension critical to movement on the other two dimensions.

Family Communication is not measured as part of the family functioning and therefore is not represented graphically on Figure 1.

The Circumplex model is built upon two conceptual frameworks of the family. The first is the notion of the family as a system. The definition of a Family System stems from Bertalanffy's (1968) definition of a system in General Systems Theory and Psychiatry. The "system" is simply a dynamic order of persons and processes standing in mutual interaction. Hill and Hansen (1960) explained the family system as a framework which functions both as an internal system for regulating relations within the family and as an external system for dealing with actions between the family and non-

FIGURE 1: CIRCUMPLEX MODEL: SIXTEEN TYPES OF MARITAL AND FAMILY SYSTEMS



family events. In systems theory communication is viewed as central to the symbolic presentations that comprise all human interaction (Goffman, 1959). According to Barnes and Olson (1982), communication, while important from the viewpoint of family development, is most fully recognized by systems theory (Russell, 1979).

The model focuses on the two dimensions of family cohesion and adaptability, but recognizes communication as the crucial component of the model. Olson, Russell, & Sprenkle (1979) hypothesized that effective communication facilitates movement to, and maintenance of systems at the desired (balanced) levels on the other two dimensions of the model. The significance of effective communication has been recognized by clinicians, researchers and family life educators.

The second conceptual framework has to do with the developmental life cycle of the family. The notion of the life cycle was suggested to unfreeze the view of the family as a semi-closed system of interacting personalities (Hill and Rodgers, 1964). The social time dimension was added to focus attention on the longitudinal career of the family system - the family life cycle. As family members and the family as a unit advance through the various stages of the family life cycle they confront certain role expectations that have been called developmental tasks. Havinghurst (1948) was the first to formulate developmental tasks for each stage in the life of the individual from birth to old age.

Burr (1973) offers a delineation of seven stages in the life of a family entitled Life Cycle Categories. as shown in Figure 2. Although this categorization is now widely used, Olson et al (1985) states, "There is lack of descriptive information about normative processes in families at different stages of the family life cycle." According to Olson et al (1983), movement is to be expected in the dimensions as the family system moves through its developmental stages.

Figure 2.

Family Life Cycle Categories

Stage	Title	Criteria for Inclusion
1	Pre-child	Never have had children and married less than 7 years.
2	Young children	Oldest child under 6 years of age
3	School age	Oldest child between 6-12
4	Teenage (adolescent)	Oldest child between 13-20
5	Launching	Oldest child over 20 and still at home, or even if no children are 20, but one has left home.
6	Post-parental	All children launched.
7	Retired	Husband retired.

One of the general benefits of the Circumplex Model is that it integrates the "family development concept" with family systems theory. It does this by recognizing the fact that the family's developmental stage may impact the type of family system that is indicated on the Circumplex Model. For example familes with adolescents will be experiencing changes due to the adolescents and transitional stages. The parents will be experiencing and responding to the adolescents demands for greater freedom, independence and power in the family system.

The Model is dynamic in that it assumes that most changes can occur in family types over time reflecting the developmental changes. It is expected that families functioning at the central or balanced level will be more functional than families functioning at extreme levels over the life cycle of the family.

The dimension of cohesion contains two intervals of moderate or balanced family functioning, separated or connected, as seen in Figure 1. Extreme intervals of family cohesion indicate an enmeshed or disengaged family. However in keeping with the notion of developmental stages a family with an infant or young children may

appropriately function in the enmeshed interval as they draw closer together due to the demands of the developmental stage, Families with Young Children.

Moderate or balanced adaptability intervals are described as flexible or structured with the extreme intervals described as chaotic or rigid. The extremes related to change include morphogenesis (change) and morphostatis (no change or stability). Some of each is necessary for a viable family system. However, too much change results in chaos and too little change results in a rigid family system. Combinations of the four intervals of adaptability and the four intervals of cohesion provide 16 possible combinations of family functioning according to the Circumplex Model.

Beaver (1978) proposed a linear model described in terms of centrifugal or centripetal measures of family functioning. Stierlin (1974) discusses the concept of centrifugal and centripetal vectors within the family as influencing adolescent separation. These styles are related to the degree that family members tend to leave the family (centrifugal) or cling together (centripetal). In other words, centrifugal can be alternated with the family functioning of being disengaged and centripetal can be alternated with the family function of being enmeshed. Beavers linear model of functioning describes minimal amounts of centrifugal or centripetal functioning as best and proceeds in a straight line with the greatest degree considered the most disturbed.

The Circumplex Model is considered a curvilinear model rather than a linear or progressive model. Although Olson et al (1983) suggests that there is a linear relationship between cohesion and adaptability in the survey made of 1,000 "normal" families (non-diagnosed, intact) he does not characterize increasing distance from the center value as necessarily indicating disturbed functioning. The linear relationship appears to exist with the facilitating dimension as well. Rodick, Henggler and Hansen (1986) found support for the hypothesis that balanced families will have more positive communication skills.

According to The American Heritage Dictionary (1969) to communicate means "to make known, impart or express oneself in such a way that one is readily and clearly understood." A concern in this proposal was parent-adolescent communication. Individual family member perceptions of communication were measured using the total Parent Adolescent Communication Scale (PACS). The total score is the sum of two subscale scores. One subscale measures open or positive communication, the second subscale measures problem or negative communication. Open or positive communication indicates empathy, reflective listening, supportive comments and effective problem solving skills. Problem or negative communication includes double messages, binds, criticism and poor problem solving techniques which minimize family members' ability to share their feelings and restrict movement related to cohesion and adaptability.

There are seven postulates built upon assumptions and interactions of the three dimensions of the Circumplex Model which suggest expected outcomes.

I. Couples/Families with balanced (two central levels) cohesion and adaptability will generally function more adequately across the family life cycle than those at the extreme of these dimensions.

II. Balanced families have a larger behavioral repertoire and are more able to change compared with extreme families.

III. If the normative expectations of a couple or family support behaviors on one or both extremes of the Circumplex dimensions, it will function well as long as all family members accept these expectations.

IV. Couples and families will function most adequately if there is a high level of congruence between the perceived and ideal descriptions for all family members.

V. Balanced couples/families will tend to have more positive communication skills than extreme families.

VI. Positive communication skills will enable balanced couples/families to change levels of cohesion and adaptability more easily than those at the extremes.

VII. To deal with situational stress and develop mental changes across the family life cycle, balanced families will change their cohesion and adaptability where as extreme families will resist change over time. (Olson et al, 1983)

All seven of these postulates may be tested using any of the three versions of Family Adaptability Cohesion Evaluation Scale (FACES) in addition to other scales. This proposal will use the FACES III as well as the Parent Adolescent Communication Scale (PACS). These two instruments will be discussed more thoroughly in Chapter 3.

Stages of Family Development

This study focused on the fourth and fifth stage of Burr's (1973) categories of the Family Cycle, Figure 2. The fourth stage is called Teenage Families or, for the purposes of this study, Families with Adolescents. Olson et al's (1983) study of nonproblem families identified Families with Adolescents as a unique stage in the family cycle. The study included families with at least one adolescent at home as well as Launching Families, the fifth stage in the family life cycle when at least one child has left home. The perception of both parents and their adolescent children are included in the norms established for families with adolescents. It was noted that parent's reports of family adaptability and cohesion reached the lowest point during the adolescent stage. The adolescents reports of these same dimensions were even lower than that of their parents.

The following are terms which have general meanings, but their meaning is specifically defined for this proposal:

Adolescents: The developmental stage in life associated with males and females ages 13 to 19 dealing with the developmental tasks of self-identity, independence, autonomy as well as establishing peer relationships. In addition, adolescents are involved in the work of school and considering career goals.

Parents: Mothers/Fathers, either maternal, adoptive, or step, parents of adolescent children. They are dealing with their own mid-life crises and developmental tasks which

include the care and education of the younger generation and may also include care of older generations.

Alternative School Families (AS): Families with adolescents who could not function effectively in traditional public or private schools and are therefore enrolled in alternative school programs. The parents and adolescent child are required to participate in therapeutic family treatment as part of the program where the adolescent attends school.

Public School Families (PS): Families with adolescents enrolled in public school. These adolescents have not repeated a grade and are not in special classes for the emotionally disturbed or learning disabled. They do not have a record of excessive unexcused absences or tardies and have never been suspended or expelled from school. They are not failing any classes and have no more than one "D" in any subject on their report card. These students are not presently involved with the juvenile court in any way. They are not, and have not been, involved in therapy in the past three years. The family is not, and has not been involved in family therapy in the last three years.

The preceding theoretical framework and definitions include working terms used in this proposal and are intended to create a common language for under standing the purpose of this study.

Hypotheses

Hypothesis I The mean(s) of parents' and adolescents' perception of communication is greater for the total PACS in the PS than in the AS group.

(a) The means of mothers' perception of communication is greater for total PACS in the PS group than in the AS group.

(b) The means of families ' perception of communication is greater for the open subscale in the PS group than the :AS group.

Hypothesis II. Parents' perception of communication is more congruent with that of the adolescent child in the AS group than in the PS group according to the scores of the PACS.

(a) Mothers' perception of communication is more congruent with that of the adolescent child in the AS group than in the PS group.

(b) Fathers' perception of communication is more congruent with that of the adolescent child in the AS group than the PS group.

(c) Fathers' perception of communication and that of the adolescent child is more congruent than the perception of communication of the two other dyads (mother/father, mother/adolescent) in the AS group than in the PS group

(d) Fathers' perception of communication is greater than that of the adolescent child in the PS group than the AS group.

(e) Mothers' perception of communication is greater than fathers perception of communication in both groups.

Hypotheses III. A higher proportion of the families in the PS group function in the balanced level than families in the AS group as measured by the FACES III.

Hypothesis IV. Parents and their adolescent child in the PS group have greater congruence between the perceived and ideal functioning scores of the FACES III than parents and adolescents in the AS group.

Relationship of Hypotheses to Postulates of Circumplex Model

The hypotheses of this study are directly related to several of Olson, Russell and Sprenkle's (1983), seven postulates mentioned above.

Hypotheses I and II of this study are concerned with the family members perception of communication scores as reported on the PACS. These two hypotheses are built upon Olson's postulate V which states: Balanced couples/families will tend to have more positive communication skills than extreme couples/families.

Hypotheses III of this study is directly related to Olson's postulate I: Couples/families with balanced (two central levels) cohesion and adaptability will generally function more adequately across the family life cycle than those at the extreme of these dimensions. Postulate I is applied in assessing the level of functioning of the AS

and PS groups according to the self-reports on the FACES III. The assumption made is that the PS group will have more families functioning at the balanced level and the AS group will have more families functioning at the extreme level.

Hypotheses IV is concerned with the congruence and discrepancies that result between the perceived family functioning and ideal, or wished for, functioning as indicated by the scores of the Perceived and Ideal version of FACES III. This hypothesis relates to Olson's postulate IV which states: Couples and families will function most adequately if there is a high level of congruence between the perceived and ideal descriptions for all family members. Hypothesis IV of this study assumes that families in the PS group will demonstrate greater congruence between the scores of the Perceived and Ideal version of FACES III and that the AS group will indicate more discrepancies between the scores on each version.

Significance of Study

Testing these hypotheses provided new and important information about parent-adolescent communication and family functioning in five areas.

1. It provides support for Barnes and Olson's (1985) finding that adolescents in non-problem families (PS families) perceive family communications more negatively than do their parents.

2. It establishes that communication is perceived more negatively by both parents and adolescents in AS families than in PS families.

3. It supports many of the postulates of the Circumplex Model and adds to the body of research concerning the Circumplex Model as a theoretical framework.

4. It provides additional information about the use of the two self report instruments related to the Circumplex Model, the FACES III and PACS as tools for assessment of family functioning.

5. It indicates that the PACS and the FACES III measure of cohesion can provide assessment tools for identifying families with adolescents who may be at risk with regard

to school functioning and can provide diagnostic information for therapists working with problem families

Independent and Dependent Variables

The independent variable is school group and the two levels of that variable are alternative school families and public school families. The dependent variables are the three measured estimates of family functioning:

(1) The perception of communication, positive or negative as indicated by the results of the PACS score.

(2) The level of family functioning, balanced mid-range or extreme, as assessed by the scores of the FACES III.

(3) The level of congruence or discrepancies reported by family members on the FACES III Perceived and Ideal version of the instrument.

CHAPTER II

Literature Review

In 1983 there were 262 studies related to "Parent-Adolescent" as compared to 384 in 1987 listed in the Psychological Abstracts. There is little question that society places great emphasis on this major transitional period in the developmental life of the adolescent as well as the parent. The three major areas of concentration presented in this literature review are: (l) the family system; trends in research; the developmental stages; communication between adoles cents and parents; (2) the conceptual framework; the Circumplex Model; the instruments, the FACES III and PACS; (3) the effects of variables such as age, gender, and role in studies using comparable instruments such as Moos' (1974, The Family Environment Scale (FES)).

Trends in Family Research

In the U. S. Department of Health and Human Services, 1981 Report, Research on Children and Adolescents in the Family Context, these trends were noted by Reuben L. Hill: (1) an exponential growth in the number of publications, (2) the increasing acceptance of family phenomena as a legitimate subject for scientific study, (3) a change in emphasis from macroscopic, large scale comparative of matrimonial institutions to microscopic explorations of living families, (4) a change from solo type of research efforts to networks of teams coordinating their research efforts, (5) a trend toward accretion of theory by making explicit the conceptual framework used and by accumulating empirically tested hypotheses into inductive theories and (6) increasing attention to scientific methods of designing, executing, and analyzing research including attention to representative sampling, measurement of variables and inductive statistics in data analysis. This study will continue these trends.

The therapeutic trend in recent years has witnessed changes. Family counseling is increasing as the treatment of choice (along with individual or group work) when clinicians are working with adolescents. This is evident in the three alternative programs

included in this study. The focus upon family interaction and transition will provide a basis for assessing problem and non-problem families for professionals working to improve the mental health of the family.

According to Hill (1981), prior to World War I the interest in family research considered courtship marriage and early parenthood. Recently families with adolescents were given an entire chapter in Olson et al's book Families (1983). They recognized the importance of the developmental stage. This stage is considered one of the most stressful to all family members in the family's life cycle. It is a time when adolescents are establishing their own identity, while moving toward their peers and away from the family. The adolescents are needing to establish their own authority while the parents are continuing to need to be authorities to their children. It would make sense that issues of independence become areas of conflict for adolescents and their parents.

Ralph Turner (1970) graphically describes the family arena where incongruencies between family members tasks and needs flourish. He suggests that much more is known about adolescent needs and struggles and far less attention and understanding has been given to the parents struggle. For example, families whose lives are geared to occupational concerns (the population in this study) reach a critical point when their children are adolescents. The parents are usually in their forties or early fifties and may have or have not realized their career goals. However, now they begin to recognize the fact that they won't reach the top of the ladder. That it is unattainable. Just at this point their adolescent child is beginning his "life quest." At the same time that the adolescent is questioning the goals that society offers him and seeks guidance and assurance in making crucial choices and commitments, his parents have typically reached the stage of reassessment, doubt and sometimes despair regarding the goals since they made their own adolescent choices.

A critical difference between the adolescent's quest and the parents realizations is society's lack of sympathy and understanding, which is available for the struggling adolescent, but not for the adult. Not enough is known about the effect of these struggles upon the adult, but it can be assumed that such conflicts may effect their perception of family functioning. If a parent is feeling despair the need to maintain his or her role as the authority figure in the family becomes more difficult to relinquish then conflict between the parent and adolescent wanting greater independence can only intensify.

Conflict between maintenance of authority and independence is only one area of conflict, but it is a critical one. Malin (1979) suggests that parents who choose to put their children into residential treatment centers frequently need to feel in control again. Perceptions between adolescents and parents would be influenced by their diverging needs thereby creating a more toxic mode of interacting.

Communication

Since communication is viewed as the underlying and facilitating dimension of Olson's Circumplex Model, problems in communication can be enormously harmful. Spiegel and Bell (1959) summarized two hundred seven studies concerned with the phenomenon of family embedded mental disorders. They found the following variables to be correlates of mental disorders: family size, birth order, divorce, separation and social class. However, it was the family processes of scapegoating, doublebind communicating,asymmetrical power relations and faulty gender identification which was considered etiological. Their findings further support the importance of identifying the differences in communication between the developmental stage specific population of families with adolescents.

There are considerably more studies involving communication patterns and interactions based upon therapeutic intervention and assumptions about the communication in problem families with adolescents. There are few studies concerned

with the existing patterns and interactions in families and the way interactions change from one developmental stage to the next. Steinberg's(1981) unique study concerned with such interactional change is entitled "Transformations in Family Relations at Puberty." He offers some substantial observations as well as a creative approach to the subject. First Steinberg (1981) credits the early infant studies,e.g., Brazelton (1969), with providing a model for the consideration of specific developmental stage interaction between parent and child. He scolds researchers for failing to study the effect of developmental tasks and transitional periods upon the relationship within the family. While the parent-infant stage is dramatically transient and observable, the adolescent stage presents a greater problem. Steinberg cleverly used the physical changes that indicate pubescence by establishing the criteria for change from the onset of puberty until the puberty apex. He reported data related to the male adolescent and his parents based upon the adolescent's physical maturity,independence, age and formal reasoning. The hypothesis tested was that the adolescent males physical maturity is associated with an increase of the sons interruptions of his parents. Twenty seven triads of adolescent males and their parents were observed three times over a period of three years by different observers. The maturation group of males demonstrated an average increase in adolescent interruptions of mothers that was substantially higher than that for the no-physical-change control group of males. The mother/ adolescent conflict was evidenced by increased interruptions on the part of the mother and vice versa. Family interactions were viewed as more rigid during early adolescence. However, during the period of pubertal apex, the mothers interruptions of the adolescent decreased and deference increased.

The pattern of transformation suggests that it is the adolescent who initiates the conflict by increasing his interruptions of the mother. The pattern that emerged with the father involved the father interupting the adolescent more and explaining himself less to the adolescent. The adolescent male deferred to his father more. The shift in power and

communication involved the adolescent male moving closer to the father in authority with the mother assuming a more secondary role.

Steinberg's (1981) findings suggest change in symbolic interaction between parents and son based upon physical development and the impending shift from childhood to adolescence. These physical changes in the son effected the entire family system.

Most of the recent research dealing with adolescent and parent communication was centered around actual counseling sessions. The emphasis was placed on changing existing communication patterns and behavior. Beckert's (1975) study involved ten week counseling sessions where adolescents and their parents were encouraged to make self disclosures. It was assumed that this would result in changes in perception of the family members view of the family functioning. Moos's (1974) Family Environment Scale, (FES), a self report scale with ten subscales was used to measure the change. There was no significant change measured. However, family members did indicate an increase in cohesion. Abrahams' (1983) study is another example of the multiple family group counseling sessions attempting to change family perceptions as measured by the FES. None of the studies using the multiple family group modality were able to define the treatment for replication purposes and the results are subjectively believed to have helped, but do not produce any statistically significant changes on the measure. Too much remains unknown and therefore non-measurable. Rodick, Henggeler and Hanson's (1986) study was related to communication and behavior,.but not to treatment.of delinquent adolescents. They both suggest that supportive communication offsets aggressive and anti-social behavior.

The Circumplex Model

The Circumplex Model as explained in Chapter 1, is the basis for many current studies involving families. Barnes and Olson (1985) tested 465 families with adolescents for the standardization of the FACES III. They further analyzed the data by testing the

hypothesis that balanced families will have more positive communication skills than extreme families. In assessing parent-adolescent communication using FACES III and the Parent-Aolescent Communication Scale, the data from parents in normal (non-diagnosed) families supported the hypothesis but the data from the adolescents did not. Olson et al (1983) and Moos (1974) both found adolescent's perception of family functioning to be more negative as a group than any other group of family members.

Rodick, Henggeler and Hanson (1986) used the FACES III to assess the level of functioning for families. They too tested the hypothesis that balanced families will have more positive communication than extreme families. Mothers in the balanced groups were observed to have significantly higher rates of supportive communication, explicit information and positive affect than the extreme types where the majority of problem dyads (mothers and daughters) were chaotically enmeshed.

In the same year, Rodick, Henggeler and Hanson (1986) tested a group of 58 mother-son dyads from father-absent families in which 29 families of the sample had an adolescent juvenile offender while the other 29 families had adolescents with no history of arrest or psychiatric referral. They were testing the first hypothesis of the Circumplex Model which states:

Couples/families with balanced (two central levels) cohesion and adaptability will generally function more adequately across the family life cycle than those at the extremes of these dimensions. (Olson et al, 1983)

Their results indicate that only 7% of the delinquent's families were balanced while 69% of the non delinquent families were balanced. This change supports the hypothesis and provides additional validation for the model.

Perception

The phenomonological approach to understanding man furnished a basis for recognition of the impact of one's perception upon one's behavior. This notion has supported the conceptual basis for Attribution Theory (Kelley, 1967). The research of

the past fifteen years has encouraged development and use of self report instruments as valid and useful tools in the diagnostic assessment of interpersonal dynamics and functioning within the family unit. Examples of these include Moos (1974) FES which has been used in hundreds of research investigations as well as the growing number of studies involving Olson et als FACES II (1985) and now FACES III (1985).

There are definite benefits to having assessments of multiple family member's perception of the family functioning. The realization of this important discrepancy measure was not sought after, but was recognized as a benefit after the fact. Pierce and Klein (1982) tested the measurable discrepancy between family members specifically parent and child to demonstrate the possible danger in relying upon the parents description of the child's behavior. Using a 52 item questionnaire, which described the child's behavior, they compared the results of the questionnaire completed by both parents with that of the children and found that a significant agreement of p .05 occurred on only seven items. The results of this study supports the notion that it is useful to have more than one family member sharing perceptions of behavior for a more valid assessment of the situation.

The discrepancies that exist between parent and child's perception exist in reverse order as well. Acock and Bengston (1980) attempted to answer the question, "Which is the better predicator of youth's orientation, what parents actually think (stated attitude) or what their children think?" Their findings suggest that what adolescents think their parents think attributed more to the adolescents development than the actual thoughts of the parents.

Symbolic interactionist (Stryker (1972) has consistently stated that people are influenced by the meaning (attribution) they give to the responses of others. Along this same line of thought Acock and Bengston (1980) cited research which emphasized the importance of attribution and perception by stating,

> Given this thrust by so many branches of social scientific thinking it is puzzling that so many researchers have continued to emphasize actual attitudes on behaviors rather than perceived or attributed orientations in their own investigations.

They studied 446 triads of parents and children ages 16-26 to assess the discrepancy. Their five findings are noteworthy: First, the attributed (or perceived) responses of parents were much more predictive of the adolescents attitudes than were the parents actual attitudes. In fact, attributed parental responses predicted children's opinions at an unexpectedly high level in light of previous studies suggesting low similarity in actual parent-child comparison of opinions. Second, adolescents tended to perceive parents as more conservative than their actual responses indicated. Third, the adolescents perceived their mothers and fathers to be highly similar in their opinion whereas a comparison of the actual responses of mothers correlated only moderately with the responses of the fathers. Fourth, the mothers' responses whether attributed or actual were more predictive than fathers' responses, of the children's opinion. Finally, at the cohort level there appeared a polarized mis-attribution of children perceiving parental attitudes as contrasted to their own and more conservative than they actually were.

While there were few discrepancies between male and female adolescent's responses, as found by Feldman and Gehring (1988) as well the opposite is true for differences in responses between the generations of adolescents and parents.

Generational Differences

Recognition of generational differences is essential to this proposal. When the existing generational differences are combined with negative perception of communication for both adolescent and parents, then conflict is likely to increase. There are those such as found in Hall's (1987) review of treatment approaches to parent- adolescent conflict who suggest that there are common issues between parents and adolescents such as dependence vs. independence rather than a generation gap. He goes on to say that as an adolescent moves toward his or her peers, expectations and behavior change and become the focal point for much conflict (peer interest vs. parent interest). Whatever the cause, if communication is negative for the adolescent and the parents then the family's ability to change is impeded.

Olson et al's (1983) study of 1,200 intact, normal (non-diagnosed) families from across the United States suggested that the level of agreement between adolescents and parents indicate that they do live in different worlds. He compared the major variables in family functioning with the responses of the family members. The degree of agreement between fathers and their adolescent children ranged from correlations as high as .46 in family cohesion to a low of .05 on the coping strategy labeled, "mobilizing to accept help from others." That low level of agreement was paralled by differences in responses between mothers and their children with a high correlation .39 on family cohesion and a low of .12 on "mobilizing to acquire help." The response between the husband and wife was more likely to be similar, but not necessarily equal. Actually agreement in responses between family members were less similar than between the male and female adolescents of the same generation. This study assessed intact families, however, family structure has many configurations.

Family Structure

The studies considered thus far have not addressed the issue of single parenting, remarriage, or high risk families, yet these differences are factors that effect family functioning.

Single parenthood is a variable that has received much attention due to the expanding number of single parent households. However, the studies of Forman & Forman (1981) and Reinhart (1977) indicate that a single parent environment is conducive to the positive growth and development of children. Forman & Forman (1981) investigated the family environment and its effect upon the adolescent's personality development. They found significant variance for the children's behavior attributed to the family's ability to function within social systems. Yet no "single parent" variable accounted for a major portion of the variance to the exclusion of other factors.

Reinhart (1977) compared 27 single parent households with 27 two parent households. Both groups included one adolescent child. These were middle class families (as was the case with most of these studies unless otherwise indicated). Reinhart (1977) found that single parent families emphasized different behavioral patterns as measured on the FES self report scale. Single parents emphasized independence, intellectual, recreational activities, and open expressions of feelings as indicated by the FES subscale results. In comparison to two parent families, single parent families were less organized, controlling, and religiously oriented as well as being less cohesive and supportive of one another. In studies such as these a measure of satisfaction and congruence on the real and ideal would have provided an additional basis for inferring that single parent households are effective, but different than two parent households.

Forman & Forman (1981), like Reinhart (1977), felt that single parent families can provide a milieu conducive to personal growth. Reinhart recommended that the "broken home" stereotype was not an appropriate designation when considering factors related to growth in a family environment.

Continuing in support of this notion were the results of Dancy and Handal's (1980) study of 60 lower middle class black families of divorced and intact families. The results of their study indicated that perceived family status was unrelated to parental marital status, but was related to perceived conflict within the family.

Ganong and Coleman (1984) like Reinhart (1977) were interested in dispelling the myths that surround all family structures that are unlike the traditional two parent-intact family. But Ganong and Coleman were interested in families where remarriage had occurred. They reviewed 35 studies which compared children in step families with children from intact families. They found no evidence that the children differed on such variables as academic achievement, field independence, I.Q., psychosomatic symptoms, personality characteristics, social behavior and family relationships.

"Families at High Risk For Destructive Child Relations in Adolescence" was the focus of Garbarino, Sebes, and Schellenbach (1984) study. In high risk families of adolescents it was found that the behaviors may be a continuation of a maladaptive pattern of behavior or that the onset of puberty may precipitate the behavior. These families tend to value the use of physical and psychological coercion against the adolescents. High risk families are socioeconomically equal to low risk families, but are more likely to have stepparents. According to results from the FACES self reports, they are more likely to function in the extreme levels for cohesion and adaptability. There tends to be more interparental conflict and less sophisticated cognitive problem solving.

Smets and Hartup (1988) compared children's symtomatology for ages 6 to 11 vs. ages 12 to 16 according to the level of family functioning. FACES II was used to assess the level of functioning according to the cohesion and adaptability intervals. The children of families functioning in the balanced level clearly displayed fewer behaviorial symptoms, but the family's level of functioning was not a discriminating factor for the older adolescents.suggesting that thes families are more difficult to assess for behavioral symptomatology. Feldman and Gehring (1988) also compared children in different age groups. They were interested in the childrens perception of family power and cohesion. Three groups, grade 6, (mean age 11.9), grade 9, (mean age 15.1), and grade 12, (mean age 18.2), of children who were compared from the results of the Family Systems Test (FAST). Older adolescents perceived far less family cohesiveness, but they did not wish for less than the younger children. The oldest adolescents perceived mothers as more powerful than did the younger adolescents. Both hypotheses were confirmed. The parents were the most powerful dyad and the parents were more powerful than the adolescents according to the perception of the three different groups.

The self reports of the adolescents were found to corroborate the field reports of the professionals working with these families. Again the issue of a greater discrepancy between perceived family functioning may indicate greater internal family conflict and problems. Steinboch's (1978) study of adolescent run-aways, compared to adolescents in crisis who did not run away, and a control group of non-problem adolescents suggested that the runaways report perception of family functioning on the FES of less cohesion, expressiveness, independence, intellectual and cultural orientation and more conflict and control differed dramatically with the parents reports. This was not the case for the other two groups, thus supporting the assessment, the greater the discrepancy in perceiving family functioning, the more likely the conflict within the family.

CHAPTER III

Methods

The Sample

The sample for this study included two groups of 92 adolescents and their parents. The approval of each Program and the Fairfax County Public Schools, (FCPS), was obtained before any subject was approached. The AS group consisted of 40 adolescents and their parent(s) involved in three treatment programs in Fairfax County. These are (1) Fairfax House, (2) Adolescent Comprehensive Day Treatment Program at the Northwest Community Mental Health Clinic and, (3) The Enterprise School. The programs include alternative school programs and the families with adolescents are involved in family therapy. The PS group consisted of 52 adolescents enrolled in a Fairfax County public high schools and their parents. These adolescents and their parents had not been involved in therapy. They were asked to complete an information form when they agreed to participate in the study.

Each of the programs for the AS group differed in the amount of time and emphasis placed upon therapeutic and academic area. The Adolescent Comprehensive Day program devoted approximately 80% of its time to therapy and 20% of its time to academics. The Enterprise School had a reverse emphasis with 86% of its time devoted to academics and 14% of its time to therapy. It was more difficult to make such a dramatic separation of tasks at Fairfax House because it is a residential treatment program. However, it does devote more of its programs time to the therapeutic process.

Alternative School Population

A description of each of the three programs indicating the purpose and the client served by the program follows.

1. Fairfax House: Fairfax House is a residential treatment center for adolescent boys between the ages of 13 and 17. It is a Fairfax County facility funded by Fairfax

county and administered by the Woodburn Center for Community Mental Health. The House is located in Annandale, Virginia.

> Youngsters who come to Fairfax House are experiencing significant difficulties in their lives. They have been referred for reasons of diagnosed educational disturbances, serious delinquency, poor school performance and attendance, emotional disruption and poor communication at home, difficulty in the community or any combination thereof. (Program Brochure.)

Referrals are made by court officers, public schools and private clinicians. The program has a maximum capacity for 12 adolescent males in residence and a maximum of 6 adolescent males in the after care day treatment program. The adolescents attend a fully accredited school program furnished by the FCPS. The adolescents and their parents are required to be involved in family therapy.

Fairfax House accomplishes its goal of helping the residents to lead more productive lives, by developing resources, skills and coping mechanisms with the following program ingredients. First and foremost, there is an integrated therapeutic community in which the child lives twentyfour hours a day, seven days a week. This community furnishes individual, group and family therapy, as well as the psychoeducational aspect of recreation. The community has its own educational program within the facility which is designated to fulfill all county and state requirements for an academic high school diploma. An individualized approach to learning enables the resident to develop a program tailored to his own needs, skills and goal levels.

II. Adolescent Comprehensive Day Treatment Program of the Northwest Center for Community Mental Health: The Adolescent Comprehensive Day Treatment Program located in Reston, Virginia, serves adolescents who are experiencing emotional difficulties. These emotional difficulties are described in the Program Brochure

They all experience difficulty which has interfered to such an extent that they are unable to function in the public schools.

The male and female adolescents who participate in the program range from 13 to 18 years. A maximum of 16 adolescents are served by this program. The referrals are made by hospitals, private clinicians and other professionals.

The day treatment program has been designed as a four day program. One day out of the week, the entire staff is involved in processing, evaluating and planning. The majority of the adolescent's day is spent in structured therapy groups including art, creative therapy, indoor and outdoor sports, seasonal activities along with the intensive treatment program of individual, group and family psychotherapy.

While 80% of the program is a structured therapeutic experience, the 20% academic aspect of the program provides a critical component of the adolescent's work. Through a liaison with FCPS special education teachers are assigned to the program to provide individualized instruction in the core courses of English, Math, and Social Studies. The adolescents receive credit from FCPS.No one is denied treatment if they are unable to pay at this federal and county supported program.

III. The Enterprise School: The Enterprise School is a private, non-profit therapeutic learning environment serving the Alternative Systems Child. The Enterprise School provides a positive learning experience through a program combining academics and counseling. It is located in Vienna, Virginia. Referrals are made through the public school.

The school serves male and female adolescents, ages 14 to 19 who need support and skill in order to make positive adjustments in the critical area of school, home and peer relationships. Students at the Enterprise School are in need of an alternative (to the traditional school setting) school program responsive to a diverse range of adolescent problems. The problem areas include mild learning disabilities, low self-esteem, short attention spans, inadequate study skills, truant behavior, lack of motivation, difficulty in

concentrating and discipline problems. Generally, they demonstrate a lack of direction and realistic goals. These same adolescents may have difficulty in forming and establishing peer relationships as well as problems in communicating with parents and other authority figures. There is a maximum of twenty-five students in the program.

The Enterprise School accomplishes its goal through an academic program that furnishes the necessary course work required for graduation in Fairfax County. Students are placed in small classes of 4 to 12 with consideration of grade level and learning styles. The students receive full credit from FCPS. FCPS provides three teachers to the program as well as county resources.

Counseling is an integral part of the program. Regular counseling services include adolescent and multiple-family group counseling. Both the counseling and academic areas are coordinated as part of the alternative system where all staff members work to strengthen the students self concept and adaptive behavior necessary for the successful completion of the students schooling and future development.

The family fee for the program is based on a sliding fee scale. These fees are supplemented by financial support from the Fairfax County Board of Supervisors through the Juvenile Court Services and FCPS

Public School Population

The research committee of FCPS and the Superintendent of Special Education approved this proposal. All of the students in the AS group are residents of Fairfax County and would be attending FCPS if they were able to function there. This study is concerned with the differences in parent adolescent communication and the level of family was necessary to have a comparison of adolescents who are able to succeed in the public schools in Fairfax County.

Control Population

A single mid-sized high school with 2400 students provided the PS population. A random selection of 600 students and their parents formed the pool from which 52

students and their parents were secured for the study. Of the 83 PS families who completed the self reports 31 families were eliminated for such reasons as grade retention current, involvement in therapy, or incomplete self reports. Of the 52 possible AS families 40 families were willing to participate. In order to maintain an adequate sample 92 families were used in the study with the understanding that such variables as student's age, sex, ethnic status, parent education and income would be tested for distribution between the two groups. Variables such as therapeutic treatment,court involvement were part of the distinct differences separating the groups. None of the PS group were involved in these activities whereas members of the AS group were. The differences were established to insure that the researcher was studying two distinct school populations,

Instruments

The results of the self report instruments, FACES III and PACS were used to test the hypotheses of this proposal. The two instruments are described in the following sections. The researcher was given permission to use these two instrument by Dr. Olson in 1986.

The Family Adaptability and Cohesion Evaluation Scale (FACES III)

The FACES III instrument was developed from the original FACES (1979) and FACES II (1982) instruments in 1985. FACES III is the current version of the scale developed to assess the two major dimensions of Olson's Circumplex Model, family adaptability and cohesion. The instrument is designed to be administered to families across the life cycle from the newly wed, pre-child couple, stage 1, to the retired couple stage (7), (Figure 2). Ideally, all family members age 12 and above should complete the self report for comparison. However in this study only the subject adolescent and the parent(s) completed the forms. The instruments were easy to administer and to score. They took less than 40 minutes to complete. Olson provides norms for cohesion (mean

37.1, SD 6.1) and adaptability (mean 24.3, SD 4.8) and cutting points which are discussed below. His values were used in this study.

FACES III was designed to obtain both perceived and ideal family functioning scores. Both the ideal and real forms of the Faces III instrument were used. Each form included ten cohesion and ten adaptability items. The 20 items are rated on a Likert scale from 1 to 5. The ratings are 1) almost never, 2) once in a while, 3) sometimes, 4) frequently, and 5) almost always.

The real form was used to measure the perception of present conditions. For example under the heading

Describe Your Family Now:

participants were asked to respond to

(1) Family members ask each other for help.

The ideal form was used to measure conditions desired by family members with a similar set of questions. Under the heading

Ideally, how would you like the family to be?

participants were asked to respond to

(21) Family members would ask each other for help.

The respondent is asked to read the statement and decide for each item from 1 to 5. Total scores range from 10 to 50 for cohesion and 10 to 50 for adaptability.

FACES III was refined to overcome certain limitations of the FACES II related to validity and reliability. One of the major goals was to reduce the correlation between cohesion and adaptability. In FACES II, the correlation between the two major dimensions was r = .65, whereas in FACES III, the correlation is .03.

It is not desirable to rely on a single family member's perception of family functioning. Olson's results show that correlation of perception of family functioning between family members is generally below .46. This is not viewed as indicating a lack of validity of his measure, but rather a reality of social science research which again and

again points to expected differences in perception among family members. This is why it is important to obtain data from multiple family members to more accurately assess family functioning (Olson et al 1983).

Adaptability and cohesion are highly complex concepts that are difficult to measure with a twenty question form. The FACES III reliability score (Cronbach's Alpha)for a sample of n = 2412 was .77 for cohesion, .62 for adaptability and .68 for the total scale. He explains this as a result of the limited number of questions used to assess the large number of concepts required to adequately represent the complexity and richness of adaptability and cohesion (Olson et al, 1985). There are currently 300 studies completed or in progress using the FACES II and FACES III instruments. (Olson, et al, 1985)

The FACES III was used to assess the levels of family functioning as balanced, mid-range or extreme based upon each individuals score for cohesion and adaptability according to the Circumplex Model.

Scoring FACES III

Olson's cutting points for the four cohesion intervals for FACES III are:

Cohesion	Range	% in Interval
Disengaged	10 - 31	18.6
Separated	32 - 37	30.3
Connected	38 - 43	36.4
Enmeshed	44 - 50	14.7

His range for the four adaptability intervals are:

Adaptability		
Rigid	10 - 29	15.9
Structured	20 - 24	37.3
Flexible	25 - 29	32.9
Chaotic	30 - 50	13.9

Each family member's score was computed individually, then as part of the family unit.

Perception of family functioning was analyzed in four different ways. First the perception of mothers in the PS and AS groups was compared. Then the perception of father, adolescents and entire families was similarly analyzed.

The Parent Adolescent Communication Scale (PACS)

Olson's PACS form provides pertinent information regarding the extent of openness or freedom to exchange ideas, information and concerns between generations, the trust or honesty experienced; and the tone or emotional tenor of the interactions between family members whether positive or negative. Two subscales, open and problem, measure the positive and negative processes and content issues in parent adolescent communication. Ten items measure the openness (positive) aspect of the communication and ten items measure problems (negative) in communication. The items are intermingled to reduce response bias.

The20 items on the PACS were answered on a Likert Scale from 1 to 5. These are (1) strongly disagree, (2) moderately disagree, (3) neither agree nor disagree, (4) moderately agree, and (5) strongly agree.

An example of an open communication question is:

8. If I were in trouble, I could tell my (mother/father, child).

An example of a problem communication question is:

20. I don't think I can tell my (mother/father, child) how I really feel about some things.

The first subscale, Open Family Communication, focuses on freedom or free flowing exchange of information, both factual and emotional as well as the lack of constraint and degree of understanding which fosters satisfaction in family interactions. The second subscale, Problems in Family Communication, focuses on the negative aspect

of communication, hesitancy to share, and generally greater dissatisfaction with their interactions (Olson et al, 1982).

The PACS is easily administered and scored. It is designed for age 12 and over and takes no longer than twenty minutes to complete. A maximum time of one hour was necessary to complete both self reports. Scores on the PACS range from 20 to 100.

The PACS initially measured three factors (1) Open family communication, (2) Problems in communication, and (3) Selective family communication using 35 items. The earlier work was conducted with samples of adolescents, but the goal for the final study was to develop a scale applicable to adults as well. Based upon factor analysis of the items, it was decided to use 20 items to measure two subscales instead of three. Subscales (2) Problem and (3) Selective which both focused on the negative were combined leaving two subscales, (1) Open and (2) Problem thereby improving the construct validity. The reliability score (Cronbach's Alpha)for a sample of n = 1,841 was .87 for Open Family Communication, .78 for (2) Problems in Family Communication and .88 for the total scale.

Norms were established to reflect differences in four subdivisions: (l) father reporting interaction with the adolescent, (mean 72.55, SD 10.74); (2) mother reporting the same,(mean 75.47, SD 11.12); (3) adolescent reports regarding their mother, (mean 66.56, SD 12.10); and (4) adolescent reports regarding their father (mean 63.74, SD 12.02).

Scoring PACS

Items from the two subscales of problem and open communication are intermingled. The scoring procedures differ for each subscale. The process was developed to reduce the response bias. While the scores of the open communication items can be added without alteration the problem items need to be flipped in point value. Any problem item, 2, 4, 5, 11, 12, 15, 18, 19, and 20 given a score of 5 would to be flipped to l and a score of 4 to 2. Once the value of these subscale items have been

flipped, they may be added to the open responses for a total scale score. Thus, the higher the score the more positive the communication. In this study the PACS raw scores will be converted into z scores first and then into T scores for data analysis.

Procedure

Every step of this study required approval of each organization's governing administrative office. Once permission was secured and the agency personnel informed the researcher sent a letter to the potential participants explaining: (l) the purpose of the study, (2) that participation was voluntary and (3) that every effort would be taken to insure confidentiality. The information sheet and the FACES III and PACS forms were mailed to the PS participants along with consent forms. Six hundred packets were mailed out to randomly selected PS families. Eighty three sets of completed forms were returned. Fifty two PS families remained after eliminating those responses which were incomplete or where any one of the distintions between the PS and AS groups, such as grade retention or involvement in therapy, for the PS control population were not met. The Directors of the three Alternative School programs suggested a one time meeting with the AS families to facilitate and insure completion of the self report. Twenty five of the possible twenty five families from The Enterprise school completed the self reports. Whereas eight out of sixteen families in the Northwest Adolescent Day Treatment and seven out of eleven families from Fairfax House completed theirs. Family members were encouraged not to discuss their responses with one another just as PS families had been. A total of forty AS families completed the self reports.

Hypotheses

Four hypotheses were advanced to serve as the basis for evaluating the responses.

Hypothesis I The mean(s) of parents' and adolescents' perception of communication is greater for the total PACS in the PS than in the AS group.

(a) The means of mothers' perception of communication is greater for total PACS in the PS group than in the AS group.

(b) The means of families ' perception of communication is greater for the open subscale in the PS group than the :AS group.

Hypothesis II. Parents' perception of communication is more congruent with that of the adolescent child in the AS group than in the PS group according to the scores of the PACS.

(a) Mothers' perception of communication is more congruent with that of the adolescent child in the AS group than in the PS group.

(b) Fathers' perception of communication is more congruent with that of the adolescent child in the AS group than the PS group.

(c) Fathers' perception of communication and that of the adolescent child is more congruent than the perception of communication of the two other dyads (mother/father, mother/adolescent) in the AS group than in the PS group

(d) Fathers' perception of communication is greater than that of the adolescent child in the PS group than the AS group.

(e) Mothers' perception of communication is greater than fathers perception of communication in both groups.

Hypothesis III. A higher proportion of the families in the PS group function in the balanced level than families in the AS group as measured by the FACES III.

Hypothesis IV. Parents and their adolescent child in the PS group have greater congruence between the perceived and ideal functioning scores of the FACES III than parents and adolescents in the AS group.

Data Analysis

The results of this study were derived from analysis of the PS and AS group's scores on the PACS and the FACES III (perceived and ideal) instruments. The findings were considered statistically significant at a level of $p = .05$.

Testing Hypothesis I

The researcher was interested in thoroughly analyzing the information provided from the scores of the FACES III and PACS concerning the differences between AS and PS groups. In order to test hypothesis I the raw scores of the PACS were converted into T scores. The raw scores of the mothers, fathers and adolescents from both groups were used to find the z score $z = \frac{x - \mu}{\sigma}$ and the T score, $T = 10\,z + 50$. The T scores of the mothers, fathers and adolescents were analyzed for intergenerational differences in the AS and PS groups and then the comparison between the AS and PS groups was made.

The first hypothesis was concerned with determining if communication in problem families is perceived more negatively than in non problem families.

This study heeded Olson et al's (1985) Inventories Manual concerning some of the limitations inherent in studying total scores and the means of these scores which result in loss of information. Therefore, the total sum of the PACS as well as the scores of the open (positive) and problem (negative) subscale scores were assessed. Further details of the approach used for analysis of this hypothosis are given on the following page.

Hypothesis I Method

Independent Variable: School Group

X_1 = PS (Public School Group)

X_2 = AS (Alternative School Group)

Dependent Variable: PACS Results

Mean PACS raw scores (x) are converted to T scores (T) by $z = \frac{x - \mu}{\sigma}$, T=10z +50

All non-integer variables (v) were converted to integers by v = TRUNC (v+ .5)

TA_m= (Adolescent re Mother)

TA_f = (Adolescent re Father)

TM = (Mother re Adolescent)

TF = (Father re Adolescent)

TPA = (Sum ofParents re Adolescents and Adolescent re Parent)

$Y_1 = TM + TA_m$

$Y_2 = TF + TA_f$

$Y_3 = \frac{1}{2}(Y_1 + Y_2)$

if only single mother, $Y_3 = Y_1$

if only single father, $Y_3 = Y_2$

For Hypothesis I(a)

Y = TM

For Hypothesis 1(b)

$Y = \frac{1}{4}(TM + TA_m + TF + TA_f)$

Hypothesis I was assessed by an analysis of variance. Separate analyses were done for the total score and the open and problem subscale scores

Testing Hypothesis II

In addition to assessing negative perceptions of communication, hypothesis II was concerned with the direction of negative perceptions. Barnes & Olson (1985) found that parents in non problem non diagnosed families perceive their communication with the adolescent child more positively than the adolescent perceives his/her communication with the parent. This study was concerned with these questions. Does the opposite condition exist in AS families? Do parents in AS families perceive the communication as negatively or more so than their children? Is the degree of negativity the differentiating factor between AS and PS groups? Hypothesis II suggested that parents in AS group families perceived their communication more negatively than parents in PS families and that their scores were closer to that of their own children. The converted total T scores were used to assess the distance between the parents and adolescent scores on the PACS. Further details of the approach used for analysis of this hypothosis are given on the following page.

Hypothesis II Method

Independent Variable: School Group

X_1 = PS (Public School Group)

X_2 = AS (Alternative School Group)

Dependent Variable: PACS Results

All non-integer variables (v) were converted to integers by v = TRUNC (v+ .5)

$Y_1 = ABS (TM - TA_m)$

$Y_2 = ABS (TF - TA_f)$

$Y_3 = \frac{1}{2}(Y_1 + Y_2)$

if only single mother, $Y_3 = Y_1$

if only single father, $Y_3 = Y_2$

$Y_4 = ABS (TM - TF)$

$Y_5 = Y_2 - Y_1$

$Y_6 = Y_2 - Y_4$

$Y_7 = TF - TA_f$

$Y_8 = TM - TF$

These computational results were assessed by an analysis of variance.

Testing Hypothesis III

Each individual family member's perception the family's functioning will be used in a chi square analysis to assess the proportional distributions of the families in the problem and non problem groups as to the level of functioning of balanced, midrange, and extreme.

FACES III scores for adolescents, mothers, fathers and an arithmetically averaged score for the entire family were computed. Each score was then classified according to which of Olson's intervals (chaotic, flexible,structured and rigid for adaptability; disengaged, separated, connected and enmeshed for cohesion) they were in. The level of family functioning was then determined from the cohesion and adaptability intervals in accordance with the Circumplex Model (Chapter I, Figure 1).

Hypothesis III Method

Independent Variable: School Group

X_1 = PS (Public School Group)

X_2 = AS (Alternative School Group)

Dependent Variable: FACES III Results

All non-integer variables (v) were converted to integers by v = TRUNC (v+ .5)

M_c = Mother's cohesion interval

M_a= Mother's adaptability interval

M_L= Mother's level of family functioning = $f(M_c, M_a)$

F_c = Father's cohesion interval

F_a= Father's adaptability interval

F_L= Father's level of family functioning = $f(F_c, F_a)$

A_c = Adolescent's cohesion interval

A_a = Adolescent's adaptability interval

A_L = Adolescent's level of family functioning = $f(A_c, A_a)$

FA_a= Family's adaptability interval = $\frac{1}{3}(M_a+F_a+A_a)$

if single mother, = $\frac{1}{2}(M_a+A_a)$

if single father, = $\frac{1}{2}(F_a+A_a)$

FA_L= Family's level of family functioning = $f(FA_c, FA_a)$

$Y_1 = M_L$

$Y_2 = F_L$

$Y_3 = A_L$

$Y_4 = FA_L$

These computational results were assessed with the chi square test of homogeneity of distribution.

Testing of Hypothesis IV

Testing hypothesis IV required a method for assessing the discrepancy or congruence between the ideal (or wished for) family functioning and the perceived (or real) family functioning. The perceived and ideal FACES III forms involve 40 items, 20 perceived and 20 ideal. Absolute difference between these two items provided the basis for assessing the family members level of congruence. The scores were inversely related, a greater discrepancy indicated less congruence between ideal and perceived family functioning. This hypotheses assumed that problem families would report a greater discrepancy between the family's perceived and ideal family functioning. The difference between ideal and perceived item score for each family member was added as absolute numbers without regard to sign. A comparison of the discrepancy between parent and adolescent was also made between AS and PS families.

Hypothesis IV Method

Independent Variable: School Group

X_1 = PS (Public School Group)

X_2 = AS (Alternative School Group)

Dependent Variable: FACES III Results

All non-integer variables (v) were converted to integers by v = TRUNC (v+ .5)

M_{cr} = Mother's cohesion score (real)

M_{ci} = Mother's cohesion score (ideal)

M_{ar} = Mother's adaptability score (real)

M_{ai} = Mother's adaptability score (ideal)

Similar definitions apply for Fathers, adolescents, and families

$Y_1 = ABS\ (M_{ci} - M_{cr})$

$Y_2 = ABS\ (M_{ar} - M_{ai})$

$Y_3 = ABS\ (F_{ci} - F_{cr})$

$Y_4 = ABS\ (F_{ar} - F_{ai})$

$Y_5 = ABS\ (A_{ci} - A_{cr})$

$Y_6 = ABS\ (A_{ar} - A_{ai})$

$Y_7 = ABS\ \frac{1}{3}\{(M_{ci}+F_{ci}+A_{ci}) - (M_{cr}+F_{cr}+A_{cr})\}$

if single mother, $= \frac{1}{2}\{(M_{ci}+A_{ci}) - (M_{cr}+A_{cr})\}$

if single father, $= \frac{1}{2}\{(F_{ci}+A_{ci}) - (F_{cr}+A_{cr})\}$

$Y_8 = ABS\ \frac{1}{3}\{(M_{ai}+F_{ai}+A_{ai}) - (M_{ar}+F_{ar}+A_{ar})\}$

if single mother, $= \frac{1}{2}\{(M_{ai}+A_{ai}) - (M_{ar}+A_{ar})\}$

if single father, $= \frac{1}{2}\{(F_{ai}+A_{ai}) - (F_{ar}+A_{ar})\}$

These computational results were assessed by an analysis of variance.

CHAPTER IV

Results

Introduction.

FACES III and PACS self report forms were completed by both the public school (PS) and alternative school (AS) groups during the months of February and March of 1987. This chapter presents the analysis of the data. Sections of this chapter include: (1) descriptive characteristics of the sample, (2) statistical results of analyses of variance and the chi square test of homogeneity on the scores of the PACS and FACES III self reports, (3) Cronbach alpha reliability coefficients reported with the T-scores of the PACS and the scores of the FACES III self reports, (4) correlation results of the PACS and FACES III scores, and (5) a summary of the results.

Descriptive Information for Public and Alternative School Groups

Nominal data for students, mothers, fathers and families were cross-tabulated and tested for significance with the chi-square test of homogeneity of distribution. Table 1 presents the percentage distribution of age, grade, and ethnic status and the results of chi-square tests of homogeneity of distribution. The groups differ significantly for sex distribution. The three alternative schools selected for this study included one all male school. All willing participants were selected but with a potential sample of only 52 participants it was decided not to exclude respondents to ensure an equal balance between boys and girls.

Table 1

Percentage Distributions of Students in the Public and Alternative School Groups by Sex, Age, Grade and Ethnic Status with Test of Homogeneity

		Group			Chi-Square	
Measure	Category	PS (n=52)	AS (n=40)	Both (n=92)	df	Value
Sex	Female	55.80%	35.00%	46.70%		
	Male	44.20	65.00	53.33	1	3.92*

Table 1 (cont.)

Percentage Distributions of Students in the Public and Alternative School Groups by Sex, Age, Grade and Ethnic Status with Test of Homogeneity

Measure	Category	Group PS (n=52)	AS (n=40)	Both (n=92)	Chi-Square df	Value
Age	4,15	50.00	30.00	41.30		
	16	36.50	57.50	45.70		
	17,18	13.50	12.50	13.00	2	4.38
Grade	8,9	28.80	35.00	31.50		
	10	28.80	40.00	33.70		
	11,12	42.30	25.00	34.80	2	3.05
Ethnic Status	White	78.80	90.00	83.70		
	Non-White	21.20	10.00	16.30	1	2.06

*Indicates significance at the .05 level.

There are no significant differences between the two groups in age, grade, and ethnic status.

Additional information about the students including suspension, retention, court supervised probation, therapy, and substance abuse emphasized the difference between the groups. The PS students all responded that they had not been suspended or retained whereas 62.5%, of the AS group had been suspended. Coincidently the same proportion, 62.5%, of students in the AS group had been retained in school. None of the PS group had ever been on probation with a court whereas 45% of the AS group had been on probation. While participants in the PS group were not involved in therapy, all members of the AS group were required to participate in therapy as part of the alternative school programs. No PS student indicated substance abuse whereas 25.6% of the AS group did.

The composition of the families regarding the number of parents and siblings is presented in Table 2 with the chi-square test of homogeneity of distribution. The analysis

of family structure was based upon the number of parents in the home (1 or 2). The specific family structure for the PS group included; 41 two parent, 8 single mothers, and 3 single fathers, for a total of 52 families. The AS group included; 25 two parent, 12 single mothers, and 3 single fathers for a total of 40 families in the AS group. Two parent families constituted over 71% of both groups. There were no significant differences in the number of parents and siblings for the PS and AS group as shown in Table 2.

Table 2
Percentage Distributions of Family Structure and Number of Siblings for Public and Alternative School Groups with Tests of Homogeneity

			Group				
						Chi-Square	
Measure	Category		PS	AS	Both	df	Value
Family Structure		n=	52	40	92		
	One Parent		21.20%	37.50%	28.30%		
	Two Parents		78.80	62.50	71.70	1	2.98
Number of Siblings		n=	52	39	91		
	0		5.80	7.70	6.60		
	1		57.70	53.80	56.00		
	2		26.90	17.90	23.10		
	3 or more		9.70	20.50	14.30	3	2.87

Information about the mother's age, education and salary for both groups is shown in Table 3 with the chi square test of homogeneity of distribution. The data on age, education and salary was analyzed separately for the mothers. The age and salary of the mothers were divided into two groups as close to the median as possible. There were no significant differences between the mothers in the PS group and the AS group at the .05 level in age, education, or salary.

Table 3
Percentage Distributions of Age, Education and Salaries of Responding Mothers by Group With Test of Homogeneity

Measure	Category		Group PS	AS	Both	Chi-Square df	Value
Age		n=	49	36	85		
	42 & under		55.10%	47.20%	51.80%		
	Over 42		44.90	52.80	48.20	1	.52
Education		n=	49	38	87		
	Non College		32.70	36.80	34.50		
	College		51.00	52.60	51.70		
	College +		16.30	10.50	13.80	1	.64
Salary		n=	36	28	64		
	$2,000-$20,000		61.10	53.60	57.80..		
	$20,001-$60,000		38.90	46.40	42.20	1	.37

*Indicates significance at the .05 level

Information regarding the fathers age, education and salary for both groups is presented in Table 4 with the chi-square test of homogeneity of distribution. The results of these tests are comparable to the mothers with no significant difference between the fathers in the PS and AS groups.

Table 4

Percentage Distributions of Age, Education and Salaries of Responding Fathers by Group With Test of Homogeneity

Measure	Category		Group PS	AS	Both	Chi-Square df	Value
Age		n=	52	29	81		
	45 & under		59.60%	51.70%	56.80%		
	Over 45		40.40	48.30	43.20	2	4.79
Education		n=	52	30	82		
	Non College		12.50	23.30	15.90		
	College		42.30	53.30	46.30		
	College +		46.20	23.20	37.80	2	4.79

Table 4 (cont.)

Percentage Distributions of Age, Education and Salaries of Responding Fathers by Group With Test of Homogeneity

Measure	Category	Group PS	AS	Both	Chi-Square df	Value
Salary	n=	41	23	64		
	$17,000-$50,000	56.10	56.50	56.30		
	$51,000-$100,000	43.90	43.50	43.50	1	.00

*Indicates significance at the .05 level.

Analysis of PACS Measures

The means and standard deviations of the PACS T-scores self reports along with the Cronbach alpha reliability coefficients, (rxx) from the raw scores of the PACS, and the results of the analysis of variance for the PS and the AS groups are shown in the next four tables. Table 5 presents the results for adolescents regarding mother and mother regarding adolescent communication for the open and problem subscales (10 items each) as well as the total PACS T-scores. The combined open and problem subscales constitute the total PACS scores. The same analysis for adolescents and fathers is reported in Table 6. The analyses of the data were carried on in two more steps. The mother and adolescents PACS T-scores are combined as well as the father and adolescent PACS T-scores for the analyses of parent and adolescent responses between groups and these results are presented in Table 7. In the final definition for analyses the adolescents, mothers, and fathers scores were arithmetically averaged for the family open and total PACS T-scores for the PS and AS group. These results are presented in Table 8. A comparison of the raw PACS scores with Olson's norms is given in the appendix.

Hypothesis I The mean(s) of parents' and adolescents' perception of communication is greater for the total PACS in the PS than in the AS group.

(a) The means of mothers' perception of communication is greater for total PACS in the PS group than in the AS group.

(b) The means of families ' perception of communication is greater for the open subscale in the PS group than the AS group.

Table 5

Means and Standard Deviation of PACS Open, Problem, and Total T-Scores for Adolescents and Mothers with Variance Ratio Test of Mean Differences and Reliability Coefficients

Measure	Statistics	Group PS (n=49)	AS (n=37)	Both (n=86)	Test df	F
Adolescent regarding mother						
Open	Means	53.43	45.30	49.93	1	6.05*
	S.D.	8.63	10.16	10.11		
	rxx	.880	.854	.886		
Problem	Means	52.00	47.05	49.93	1	5.51*
	S.D.	7.20	8.61	10.12		
	rxx	.841	.525	.760		
Total	Means	53.14	45.76	49.97	1	12.71*
	S.D.	10.04	8.79	10.15		
	rxx	.914	.820	.892		
Mother regarding adolescent						
Open	Means	54.63	43.51	49.85	1	36.21*
	S.D.	6.86	10.26	10.09		
	rxx	.709	.839	.847		
Problem	Means	55.41	42.86	50.01	1	52.17*
	S.D.	8.35	7.44	10.09		
	rxx	.729	.587	.791		
Total	Means	55.59	42.62	50.01	1	57.70*
	S.D.	7.20	8.61	10.12		
	rxx	.799	.834	.887		

*Indicates significance at the .05 level.
df numerator = 1, denominator n.-2.
rxx Cronbach's Alpha, Reliability Coefficient

The means and standard deviations of the PACS T-scores are shown in Table 6 for the adolescent regarding father and father regarding adolescent communication. Table 6 also includes Cronbach alpha coefficients (rxx) from the raw scores of the PACS as well as the analysis of variance. test results.

Table 6

Means and Standard Deviation of PACS Open, Problem, and Total T-Scores for Adolescents and Fathers with Variance Ratio Test of Mean Differences and Reliability Coefficients

		Group			Test	
Measure	Statistics	PS	AS	Both	df	F
Adolescent regarding father						
	n=	44	28	72		
open	Means	52.34	46.18	49.94	1	6.84*
	S.D.	10.57	8.27	10.41		
	rxx	.930	.831	.910		
Problem	Means	51.54	47.86	50.11	1	2.30
	S.D.	11.09	8.14	10.15		
	rxx	.800	.593	.740		
Total	Means	52.25	46.68	50.08	1	5.51*
	S.D.	10.93	7.72	10.12		
	rxx	.923	.821	.906		
Father regarding adolescent						
	n=	42	26	68		
Open	Means	53.21	44.50	49.88	1	14.23*
	S.D.	9.02	9.62	10.13		
	rxx	.796	.777	.816		
Problem	Means	55.79	40.96	50.12	1	69.32*
	S.D.	7.09	7.20	10.14		
	rxx	.531	.467	.745		
Total	Means	55.07	41.88	50.00	1	44.72*
	S.D.	7.76	8.13	10.16		
	rxx	.784	.766	.856		

*Indicates significance at the .05 level.
df numerator = 1, denominator n.-2.
rxx Cronbach Alpha, Reliability Coefficient.

The mean of the adolescent regarding mother Total PACS scores were higher for the PS group than the same measure for the AS group (53.14 vs 45.76) as shown in table 5. The F-ratio (12.70) confirmed that these results are significantly different. In the same table the mean scores for mother regarding adolescent exhibited an even greater difference between the PS and AS groups (55.59 versus 42.62) and the F-ratio value of 57.70 confirmed that these results are statistically significant. This indicates that the PS group mothers and adolescents perceive their communications more positively than do the AS group mothers and adolescents. The statistically significant higher negative scores for the PS vs. AS group indicates less problem with communication and are consistent with the positive communication result. The null hypothesis was rejected at the .05 level for all measures with regard to mother and adolescent.

Analysis of the data in Table 6 shows that fathers and adolescents also perceive their communication more positively in the PS group than in the AS group. The PACS scores for the adolescents regarding father were higher than the same measure for the AS group for all three measures but these results were statistically significant at the .05 level only for the total and positive measures. These results demonstrate that adolescents in the PS group were significantly more positive about their communication with their fathers than were adolescents in the AS group. The null hypothesis was rejected for both the total and positive measures for adolescent regarding father. The mean scores were significantly different between the PS and AS groups in table 6 for the father with respect to the adolescent for all three measures. This indicates that PS fathers regard their communications with their adolescent more positively than do the AS fathers. The null hypothesis was rejected for all three measures thereby indicating that all family members in the PS group scores were higher representing more positive communication than the AS group.

Subsequently each parent, mother regarding adolescent, and father regarding adolescent total PACS T-scores was added to the corresponding adolescent measure,

(adolescent regarding mother or adolescent regarding father). The totals were arithmetically averaged. The means and standard deviations of these scores with the variance F-ratio tests for parents and adolescents are presented in Table 7.

Table 7

Means and Standard Deviations of PACS T-Scores for the Sum of Adolescent and Parent Response with Variance Ratio Tests

			Group			Test	
Measure	Statistics		PS	AS	Both	df	F
Mother and adolescent							
		n=	49	37	86		
Total	Means		54.67	44.43	50.27	1	36.73*
	S.D.		7.50	8.07	9.25		
Father and adolescent							
		n=	42	26	68		
Total	Means		54.17	44.46	50.46	1	31.16*
	S.D.		7.46	6.07	8.39		

*Indicates significance at the .05 level.

The mean scores were significantly different between the PS and AS groups in table 7 for both the mother plus adolescent and father plus adolescent dyads. The results show that parent and adolescent communication is more positively regarded in the PS group than in the AS group and again confirm hypothesis 1, The null hypothesis was rejected at the .05 level for both measures.

The combination of PACS T-scores was carried one step further. Family members, three or two as the case may be , PACS T-scores were totaled and arithmetically averaged Table 8 presents the means, standard deviations and variance ratio test of mean differences. for the families open subscale and total PACS T-scores.

Table 8

Means and Standard Deviations of Arithmetic Averages of Total and Open PACS T-Scores for Families with Variance Ratio Test

		Group			Test	
Category	Statistics	PS (n=52)	AS (n=40)	Both (n=92)	df	F
Open	Means	54.00	45.75	50.41	1	33.23*
	S.D.	5.82	7.91	7.92		
Total	Means	54.69	45.50	50.70	1	40.12*
	S.D.	6.59	7.28	8.25		

*Indicates significance at the .05 level.

PACS scores on the positive (open) subscale for families from the PS group were higher than the same measure for the AS group (54.00 vs. 45.75). This means that the PS families perceive their communications more positively than do the AS families. The F-test value (33.23) confirmed that this difference was statistically significant. The null hypothesis was rejected at the .05 level for section (b) of hypothesis I. The mean scores were significantly different between the PS and AS groups in Table 8 for both total and open measures for the family. In each of the defined areas of 1) individual, adolescent, mother, and father 2) parent and adolescent, and 3) family, the public school group PACS T-scores were significantly greater than the AS group.

Results of pairwise within groups product-moment correlations of the PACS T-scores for the adolescent regarding mother(AM), mother regarding adolescent(MA), adolescent regarding father(FA),and father regarding adolescent(FA) are presented in Table 9

Table 9

Within Groups Product-Moment Correlations of PACS Total T-Scores

	Measure			
Measure	AM	MA	AF	FA
AM (Adolescent re Mother)	1.000	0.587*	0.613*	0.367*
MA (Mother re Adolescent)		1.000	0.236*	0.262*
AF (Adolescent re Father)			1.000	0.293*
FA (Father re Adolescent)				1.000

* Indicates significance at the .05 level.

The within group pairwise correlations were all significant for the total PACS T-scores The adolescent re mother and mother re adolescent were highly correlated indicating that mothers and adolescents perception of communication with each other is correlated . The adolescent re mother and adolescent re father measures were also highly correlated indicating that adolescents perception of communication with parents is similar regardless of sex

Congruence of Perception of Communication for the PS and AS Groups.

The extent to which the adolescent and his/her parents have a similar perception of their communication is tested in this section the absolute difference between adolescent and parent PACS T-scores is used as the measure of congruence of perception of communication. The results of these measures are shown in Table 10 for the adolescent and mother, adolescent and father. and adolescent and parent. A similar measure of congruence between the mother's perception of communication with the adolescent is also shown in table 10.A simple difference of direction between family members PACS T-scores completes the statistical analysis for Hypothesis II and is presented in Table 11.

Hypothesis II. Parents' perception of communication is more congruent with that of the adolescent child in the AS group than in the PS group according to the scores of the PACS.

(a) Mothers' perception of communication is more congruent with that of the adolescent child in the AS group than in the PS group.

(b) Fathers' perception of communication is more congruent with that of the adolescent child in the AS group than the PS group.

(c) Fathers' perception of communication and that of the adolescent child is more congruent than the perception of communication of the two other dyads (mother/father, mother/adolescent) in the AS group than in the PS group

(d) Fathers' perception of communication is greater than that of the adolescent child in the PS group than the AS group.

(e) Mothers' perception of communication is greater than fathers perception of communication in both groups.

The means and standard deviations of the congruence measures between the parents, mothers, fathers, and adolescents PACS T-scores are presented in Table 10 with variance ratio tests of mean differences for both groups.

Table 10

Means and Standard Deviations of Congruence Measures Between Parents, Mothers, Fathers, and Adolescents PACS T-Scores with Variance Ratio Test of Mean Differences

		Group			Test	
Measure	Statistics	PS	AS	Both	df	F
		Mother-Adolescent Congruence				
	n=	49	37	86		
Means		7.91	5.95	6.95	1	3.01
S.D.		5.07	4.10	4.74		
		Father-Adolescent Congruence				
	n=	42	26	68		
Means		8.17	8.85	8.43	1	.15
S.D.		6.75	7.20	6.88		

Table 10 (cont.)

Means and Standard Deviations of Congruence Measures Between Parents, Mothers, Fathers, and Adolescents PACS T-Scores with Variance Ratio Test of Mean Differences

Measure	Statistics		Group PS	AS	Both	Test df	F
			Parent-Adolescent Congruence				
		n=	52	40	92		
	Means		8.00	7.18	7.64	1	.76
	S.D.		4.63	4.33	4.50		
			Mother-Father Congruence				
		n=	39	23	62		
	Means		6.90	5.61	6.42	1	.72
	S.D.		6.48	4.38	5.78		

*Indicates significance at the .05 level.
df numerator = 1, denominator = n.-2.

The mean scores of the absolute difference between the parent and adolescent in the PS and AS groups were not significantly different (8.00 vs. 7.18) The F-ratio indicated no significant difference between the PS and AS groups at the .05 level. The null hypothesis was not rejected. This proved to be the case for all of the sections of Hypothesis II as shown in table 10. In these cases, larger mean values imply less congruence between family members perception of communication in the two groups. Therefore the results for Hypothesis II as stated above indicate that the PS parents and their adolescent child were not significantly closer in their perception of communication between themselves than were parents and adolescent in the AS group.

The means of the absolute difference between the mother and adolescent scores in the PS and AS groups were not significantly different (7.71 vs. 5.95). The null hypothesis was not rejected. The perception of mothers and adolescents in the PS group about communication between themselves was not closer than it was for the AS group mothers and adolescents.

The means of the absolute difference between the father and adolescent scores in the PS and AS group were not significantly different (8.17 vs. 8,85.) The null hypothesis was not rejected. The results from table 10 indicate that fathers and adolescents perception of communication between themselves in the PS group was not significantly closer than it was in the AS group.

An additional test was performed to compare the results of the three dyads (mother/adolescent, father/adolescent, and mother/father). The results shown in Table 11 include means of the difference between the means of the absolute difference between the dyads father-adolescent minus mother-adolescent, father-adolescent minus mother-father, mother-adolescent minus mother-father measures . The means and standard deviations of these differences between groups PACS T-scores with the variance ratio test is also shown in Table 11.

Table 11

Mean and Standard Deviation of the Difference Between PS and AS Group Father-Adolescent, Mother-Adolescent, and Mother-Father Absolute Mean Differences of PACS T-Scores with Variance Ratio Test.

		Group			Test	
Measure	Statistics	PS	AS	Both	df	F
Father-adolescent minus mother-adolescent						
	n=	39	23	62		
	Means	.79	3.13	1.66	1	1.20
	S.D.	7.82	8.57	8.18		
Father-adolescent minus mother-father						
	n=	39	23	62		
	Means	1.56	3.22	2.18	1	.54
	S.D.	8.89	7.88	8.50		
Mother-adolescent minus mother-father						
	n=	39	23	62		
	Means	-.79	-.09	-.52	1	.54
	S.D.	8.49	5.76	7.55		

and AS groups. The null hypothesis was not rejected at the .05 level for Hypothesis II c.

The pairwise product-moment correlations of the absolute differences of the PACS T-scores, between family members, mother - adolescent, father -adolescent, mother - father is presented in table 12.

Table 12

Within Groups Product-Moment Correlations of Absolute Differences Between PACS Total T-Scores

	Measure		
Measure	MMA	FMA	MMF
MMA (Mother - Adolescent)	1.000	0.107	-0.017
FMA (Father - Adolescent)		1.000	0.128
MMF (Mother - Father)			1.000

There were no significant correlations within or between the PACS measures in Table 12.

The adolescents' total PACS T-scores were subtracted from the fathers' total PACS T-scores and the fathers from the mothers in both groups. Table 13 presents the means and standard deviations of these differences father minus adolescents and mothers minus fathers total PACS T-scores with the variance ratio tests. The results indicate a significant difference between the means of the PS and AS group for the measure father minus adolescent.(2.26 vs.-4.62) This finding confirms (d), that fathers' perception of communication is more positive than their adolescent child in the PS group and is less positive than the adolescent in the AS group.

Table 13

Means and Standard Deviations of PACS T-Score Difference Between Family Members with Variance Ratio Test

Measure	Statistics		Group PS	Group AS	Group Both	Test df	Test F
Father minus adolescent							
Total		n=	42	26	68		
	Means		2.26	—4.62	-.37	1	6.94*
	S.D.		10.42	10.54	10.92		
Mother minus father							
Total		n=	39	23	62		
	Means		4.80	-.57	-.10	1	.11
	S.D.		9.53	7.19	8.68		

*Indicates significance at the .05 level.
df numerator = 1, denominator = n.-2.

Only the test for section (d) of Hypothesis II rejected the null hypothesis. All of the other tests for hypothesis II did not reject the null.

Analysis of FACES III Measures

The means and standard deviations of the cohesion and adaptability subscales of FACES III self reports for the adolescent and each parent in the PS and AS groups are shown in table 14 with the variance ratio tests and Cronbach alpha reliability coefficients for each measure. The reliability coefficients were calculated for the 10 cohesion and 10 adaptability item subscales of the total FACES III measure. Then the two subscale measures are considered in terms of interval scores which are used collectively to assess the level of family functioning.

Table 14

Means and Standard Deviation of Cohesion and Adaptability Subscale Scores of FACES III of Adolescents, Mothers and Fathers with Reliability Coefficient and Variance Ratio Test

Measure	Statistics		Group PS	Group AS	Group Both	Test df	Test F
Adolescents							
		n=	52	40	92		
Cohesion	Means		33.77	25.30	0.09	1	23.14*
	S.D.		7.78	9.08	9.23		
	rxx		.875	.888	.904		
Adapt-ability	Means		23.58	26.20	24.72	1	3.69
	S.D.		5.10	7.95	6.59		
	rxx		.573	.744	.688		
Mothers							
		n=	49	37	86		
Cohesion	Means		38.37	29.46	34.53	1	33.04*
	S.D.		6.50	7.86	8.35		
	rxx		.868	.875	.906		
Adapt-ability	Means		24.22	26.27	25.00	1	2.82
	S.D.		5.55	5.60	5.65		
	rxx		.740	.699	.729		
Fathers							
		n=	42	26	68		
Cohesion	Means		37.95	29.54	34.73	1	32.79*
	S.D.		6.27	5.21	7.15		
	rxx		.855	.728	.879		
Adapt-ability	Means		23.10	24.35	23.57	1	1.35
	S.D.		4.13	4.60	4.32		
	rxx		.606	.659	.659		

* Indicates significance at the .05 level.
df numerator = 1, denominator n.-2.
rxx Cronbach alpha reliability coefficient.

The mean score for the cohesion subscale was significantly higher for adolescents, mothers and fathers in the PS group than for their counterparts in the AS group. None of the adaptability subscale scores were significantly different between members of the PS and AS groups. The results of the cohesion subscale indicate that the adolescents, mothers, and fathers in the PS group perceive significantly greater emotional closeness than do their AS counterparts. However there is no significant difference between the PS and AS groups in the fathers, mothers or adolescents perception of their family's ability to deal with change.

The PACS communications measure and the FACES III cohesion subscale measure both discriminate between the PS and AS groups. Within groups product-moment correlations of PACS total T-Scores with FACES III cohesion and adaptability subscale scores were computed for mothers, fathers, adolescents where communication was with mother, adolescents where communication was with father, and families to see if these are independent variables. The results (Appendix tables 9 - 13) show that there is a statistically significant correlation (.353 to .498) between communications and cohesion for all groups. There was a statistically significant correlation (.244 and .293) between cohesion and adaptability for adolescents and mothers. The correlation between cohesion and adaptability (.147 and .173) for fathers and families was not statistically significant. There was no significant correlation between communication and adaptability except for PS mothers (.495).

Hypotheses III. A higher proportion of the families in the PS group function in the balanced level than families in the AS group as measured by the FACES III.

The results of the chi square test of homogeneity for the three levels of functioning, (balanced, mid range, and extreme) for the PS and AS groups are presented in table 15 with the percentage distribution of the levels of functioning for adolescents, mothers, fathers, and arithmetically averaged families.

Table 15

Percentage Distribution of Functioning Level of FACES III Scores of Adolescents, Mothers, Fathers and Arithmetically Averaged Families with Test of Homogeneity of Distribution

Measure	Category		Group PS	Group AS	Group Both	Chi-Square df	Chi-Square Value
Adolescents Functioning Level							
		n=	52	40	92		
	Balanced		32.70%	5.00%	20.70%		
	Mid-Range		42.30	55.00	47.80		
	Extreme		25.00	40.00	31.50	2	10.77*
Mothers Functioning Level							
		n=	49	37	86		
	Balanced		40.80%	16.20%	30.00%		
	Mid-Range		40.80	64.90	51.20		
	Extreme		18.40	18.90	18.60	2	6.61*
Fathers							
		n=	42	26	68		
	Balanced		50.00	19.20	38.20		
	Mid-Range		38.10	61.50	47.10		
	Extreme		11.90	19.20	14.70	2	6.44*
Families							
		n=	52	40	92		
	Balanced		55.80	12.50	37.00		
	Mid-Range		34.60	60.00	45.70		
	Extreme		9.60	27.00	17.40	2	18.89*

*Indicates significance at the .05 level.

In order to test hypothesis III the data in table 15 was collapsed into two categories, balanced and others, The results are presented in table 16.

Table 16

Percentage Distribution of Functioning Level of FACES III Scores for Balanced Level Compared to Others with Test of Homogeneity of Distribution

Measure	Category		Group PS	AS	Both	Chi-Square df	Value
Adolescents							
		n=	52	40	92		
	Balanced		32.7%	5.0%	20.7%		
	Others		63.7	95.0	79.3	1	10.58*
Mothers							
		n=	49	37	86		
	Balanced		40.8	16.2	30.2		
	Other		59.2	83.8	69.8	1	6.05*
Fathers							
		n=	42	26	68		
	Balanced		50.0	19.2	38.2		
	Other		50.00	80.8	61.8	1	6.44*
Families							
		n=	52	40	92		
	Balanced		55.8	12.3	37.0		
	Others		44.2	87.7	63.0	1	18.17*

*Indicates significance at the .05 level.

A significantly higher percentage of adolescents, mothers, and fathers in the PS group perceived a balanced level of functioning for their families than was the case in the AS group. The null hypothesis was rejected at the .05 level.

The family score was computed from the arithmetic mean of the father's, mother's and adolescent's subscale score for each family. The results of the family functioning scores as tested by the chi square test of homogeneity indicated that a significantly higher percentage of families in the PS group perceived their families as functioning in the

balanced level than did families in the AS group. The null hypothesis was rejected at the .05 level.

These results confirmed Hypothesis III . A higher proportion of Families in the PS group function in the balanced level than in the AS group.

Hypothesis IV. Parents and their adolescent child in the PS group have greater congruence between the perceived and ideal functioning scores of the FACES III than parents and adolescents in the AS group.

Adolescent, mother and father interval scores for cohesion and adaptability subscales (both real and ideal) for the PS and AS groups are presented in tables 17, 18, and 19. The intervals used by Olson were collapsed in order to have sufficient numbers in each cell for the test of homogeneity. These interval scores represent the range of family functioning in each of the FACES III subscales for cohesion and adaptability for the real and ideal or wished for self reports. The statistical results of analysis of the absolute difference between these measures are presented in Table 17. This Table presents the percentage distribution of adolescents' interval scores for the Real and Ideal FACES III self report with the test of homogeneity of distribution.

Table 17

Percentage Distribution of Adolescents Adjusted Interval Scores for FACES III with Test of Homogeneity of Distribution

		Group				
		PS	AS	Both	Chi-Square	
Measure	Interval	(n=52)	(n=40)	(n=92)	df	Value
Real Cohesion						
	10.31	42.3%	80.0%	58.7%		
	32-37	25.0	10.0	18.5		
	38-50	32.7	10.0	22.8	2	13.33*

Table 17 (cont.)

Percentage Distribution of Adolescents Adjusted Interval Scores for FACES III with Test of Homogeneity of Distribution

Measure	Interval	Group PS (n=52)	AS (n=40)	Both (n=92)	Chi-Square df	Value
Real Adaptability						
	10-19	25.0%	20.0%	22.8%		
	20-24	30.8	27.5	29.3		
	25-29	32.8	22.5	27.2		
	30-50	13.5	30.0	20.7	3	3.89
Ideal Cohesion						
	10-31	7.7	30.0	17.4		
	32-37	23.1	32.5	27.2		
	38-43	38.5	17.5	29.3		
	44-50	30.8	20.0	26.1	3	11.60*
Ideal Adaptability						
	10-29	21.2	15.0	18.5		
	30-50	78.8	85.0	81.5	1	.57

*Indicates significance at the .05 level.
1Non adjusted cell results are located in the Appendix.

Table 18 presents the percentage distribution of mothers' interval scores for the real and ideal FACES III self report with the test of homogeneity of distribution.

Table 18

Percentage Distribution of Mothers Interval Scores for FACES III with Test of Homogeneity of Distribution

Measure	Interval	Group PS (n=49)	AS (n=37)	Both (n=86)	Chi-Square df	Value
Real Cohesion						
	10.31	14.3%	59.5%	33.8%		
	32-37	24.5	18.9	22.1		
	38-50	61.2	21.6	44.2	2	20.54*
Real Adaptability						
	10-19	24.5	16.2	20.9		
	20-24	30.6	16.2	24.4		
	25-29	24.6	40.5	31.4		
	30-50	20.4	27.0	23.3	3	4.61
Ideal Cohesion						
	10-43	56.3	73.0	63.5		
	44-50	43.8	27.0	36.5	1	2.52
Ideal Adaptability						
	10-29	37.5	27.0	32.9		
	30-50	62.5	73.0	67.1	1	1.04

*Indicates significance at .05 level.
1Non adjusted cell results are located in the Appendix.

Table 19 presents the percentage distribution of fathers interval scores for the real and ideal; FACES III self report with the test of homogeneity of distribution.

Table 19

Percentage Distribution of Fathers Interval Scores for FACES III with Test of Homogeneity of Distribution

Measure	Interval	Group PS (n=42)	AS (n=26)	Both (n=68)	Chi-Square df	Value
Real Cohesion						
	10-31	14.3%	65.4%	33.8%		
	32-37	33.3	26.9	30.9		
	38-43	31.0	7.7	22.1		
	44-50	24.4	0.0	13.2	3	22.12*
Real Adaptability						
	10-19	21.4	19.2	20.6		
	20-24	38.1	34.6	36.8		
	25-50	40.5	46.2	42.9	2	.21
Ideal Cohesion						
	10-43	50.0	80.8	61.8		
	44-50	50.0	19.2	38.2	1	6.44*
Ideal Adaptability						
	10-29	52.4	42.3	48.5		
	30-50	47.6	57.7	51.5	1	.65

*Indicates significance at the .05 level.
1Non adjusted cell results are located in the Appendix.

There was a statistically significant difference between the PS and AS adolescents for both real and ideal cohesion with more PS adolescents reporting high values. The adaptability scores were not significantly different for either the real or the ideal case.

More mothers in the PS group reported higher real cohesion than in the AS group. The difference was significant at the .05 level. Unlike the adolescents there was not a statistically significant difference between the distribution of PS and AS mothers with regard to ideal cohesion. The distribution of PS and AS mothers with regard to real and ideal adaptability also was not significantly different.

There was a statistically significant difference between the PS and AS fathers for both real and ideal cohesion with more PS fathers reporting high values. The adaptability scores were not significantly different for either the real or the ideal case.

The adolescents, mothers, and fathers FACES III scores were arithmetically averaged for the families interval scores which are presented in Table 20 with the chi square test of homogeneity of distribution.

Table 20

Percentage Distribution of Families Adjusted Interval Scores for FACES III with Test of Homogeneity of Distribution

		Group				
		PS	AS	Both	Chi-Square	
Measure	Interval	(n=52)	(n=40)	(n=92)	df	Value
Real Cohesion						
	10-31	19.2%	75.0%	43.5%		
	32-50	80.8	25.0	56.5	1	26.39*
Real Adaptability						
	10-19	11.5	10.0	10.9		
	20-24	48.1	27.5	39.1		
	25-29	30.8	35.0	32.6		
	30-50	9.6	27.5	17.4	3	6.78
Ideal Cohesion						
	10-43	69.2	85.0	76.1		
	43-50	30.8	15.0	23.9	1	3.09
Ideal Adaptability						
	10-29	36.5	12.5	26.1		
	30-50	63.5	87.5	73.9	1	6.78*

*Indicates significance at the .05 level.
1Non adjusted cell results are located in the Appendix.

More families in the PS group reported high real cohesion than in the AS group. The difference was significant at the .05 level. The distribution of PS and AS families with regard to ideal cohesion and real adaptability was not significantly different. Significantly more families in the AS group reported high ideal adaptability than in the PS group.

The results of the analysis of variance for the absolute difference (discrepancy)between ideal and real cohesion adaptability scores for each family member is presented in table 21. Arithmetic averaged family results are shown in the same table with the variance ratio test.

Table 21

Means and Standard Deviation of Discrepancy Between Ideal and Real Cohesion and Adaptability Scores for Adolescents, Mothers, Fathers and Arithmetic Averages of Families with Variance Ratio Test

			Group			Test	
Measure	Statistics		PS	AS	Both	df	F
Adolescents							
		n=	52	40	92		
Cohesion	Means		17.15	29.85	22.47	1	10.17*
	S.D.		16.64	21.56	19.86		
Adapt-	Means		30.10	44.13	36.20	1	12.64*
ability	S.D.		18.19	19.48	19.92		
Mothers							
		n=	48	37	85		
Cohesion	Means		12.33	29.22	19.68	1	18.09*
	S.D.		14.95	21.62	19.91		
Adapt-	Means		27.13	28.70	27.81	1	.20
ability	S.D.		17.94	13.82	16.20		

Table 21 (cont.)

Means and Standard Deviation of Discrepancy Between Ideal and Real Cohesion and Adaptability Scores for Adolescents, Mothers, Fathers and Arithmetic Averages of Families with Variance Ratio Test

Measure	Statistics		Group PS	AS	Both	Test df	F	
Fathers								
		n=	42	26	68			
Cohesion	Means		9.74	24.42	15.35	1	25.30*	
	S.D.		7.97	16.04	13.66			
Adapt-	Means		23.31	23.19	23.26	1	.00	
ability	S.D.		11.19	12.58	11.65			
Families								
		n=	42	26	68			
Cohesion	Means		13.5	28.43	19.99	1	26	11*
	S.D.		11.45	16.54	15.69			
Adapt-	Means		27.29	33.60	30.03	1	7.83*	
ability	S.D.		10.33	11.23	11.12			

*Indicates significance at the .05 level.

There was a significant difference between the ideal and real means for the absolute difference cohesion and adaptability scores for the adolescents in the PS and AS groups. There was less discrepancy between the PS adolescents ideal and real scores than the AS adolescents scores at the .05 level. Mothers and fathers in the PS group exhibited significantly less discrepancy for the ideal and real cohesion subscale. There was no significant difference for mothers and fathers in the two groups for the ideal and real adaptability subscale. However when the family members absolute differences between the ideal and real cohesion and adaptability were arithmetically averaged the PS families were significantly less discrepant than the AS families for both subscales. The null hypothesis was rejected at the .05 level.

Summary

The findings in Chapter IV concerning the group composition demonstrated that there were no significant differences between the PS and AS groups except for the distribution of sex. Family structure, age, education and salary of the parents were not significantly different between the two groups.

Hypotheses I and II concerned the results of the PACS communications self report scores. Adolescents, mothers and fathers, parents and adolescents, and combined family PACS T-scores were consistently significantly higher for the PS group than for the AS group. The PS group reported a more positive view of communication within their family dyads . The null hypothesis was rejected for Hypothesis I. However for Hypothesis II the perception of communication was not more congruent for adolescents, mothers and fathers in the AS group. While AS family members did view their communications more negatively they were not in closer agreement than were the PS family members concerning their perception of communication. The null hypothesis was not rejected for any part of Hypotheses II except section (d) indicating that PS fathers perceive their communication with their adolescent children more positively than do fathers in the AS group.

Hypotheses III and IV concerned the FACES III self report of family functioning and the report subscales of cohesion and adaptability. Findings for Hypothesis III indicated that PS family members (adolescents, mothers, and fathers) reported significantly greater family cohesion than did AS family members. There were no significant differences between the groups regarding the adaptability subscale. When interpreted in terms of family functioning level a significantly greater proportion of families in the PS group perceived their families as functioning in the balanced level thereby confirming Hypothesis III. Absolute differences between the real and ideal FACES III self reports demonstrated that PS family members were significantly more congruent than were AS family members. These results indicated that the PS group

viewed their real and wished for family functioning with less discrepancy than did the AS group thus confirming Hypothesis IV.

Chapter V

Summary, Conclusions, and Recomendations

Introduction

There are clear differences in communication and family functioning between families with adolescents in Public and Alternative Schools. These differences lead to suggestions for school professionals dealing with high risk school students, therapists involved with families with adolescents, and researchers interested in the relationship between school performance and family functioning. Communication and cohesion are shown to be important diagnostic variables. Support is shown for the postulates of the Circumplex model of family functioning and for the use of the PACS and FACES III instruments.

The next section of this chapter describes the procedures used in this study. Results and conclusions of the research are then summarized. This is followed by a discussion of the results. Then practical applications of the results are discussed and the final section provides recommendations for further research.

This research provides insight and understanding of the parent-adolescent relationship for professionals working with this special population of adolescents and their families. It demonstrates that there are differences in communication and family functioning between families with adolescents in alternative schools and family treatment and families with adolescents who are in public school and not in treatment.

Description of Procedure

Communication and family functioning were measured for two groups of adolescents and their families. The sample population of families with adolescents in treatment came from three Fairfax County alternative school programs, The Enterprise School, Fairfax House, and The Adolescent Comprehensive Day Treatment Program. Forty families from these three programs voluntarily participated in this study. The second group consisted of 52 families from a Fairfax County public school. The 40 AS

families and 52 PS families comprised the total sample population of 92 families with adolescents. The two student groups were not significantly different in age, grade, and ethnic status. There was a higher percentage of girls in the PS group. Gender differences were not significant in studies by Feldman and Gehring (1988) and Olson et al (1983). The two groups were not significantly different according to family structure (parents.- one or two, and number of siblings). The parents in the two groups were similar according to education, age and salary. The sample population consisted primarily of white upper middle income families in suburban northern Virginia.

The hypotheses of this study were developed in relationship to the seven postulates of the Circumplex model as presented in chapter 1. The instruments used to measure the participant's perception of family functioning and communication were based upon the theoretical framework of Circumplex Model. The Parent Adolescent Communication Scale (PACS) was used to measure the AS and PS group's perception of communication. It is a twenty item self report scale made up of ten open and ten problem item subscales. The higher the score the more positive and open the communication as perceived by the respondent. The instrument used to measure perception of family functioning was the Family Adaptability Cohesion Evaluation Scale (FACES III). It is a twenty item self report made up of ten cohesion and ten adaptability item subscales. Olson developed numerical intervals (chapter 3) as norms for cohesion and adaptability that provide the basis for categorizing the level of family functioning as balanced, mid-range or extreme. The questionnaires were completed in February and March of 1987.

Results

Hypotheses I and II are concerned with the results of the PACS self report which measures communication.

Hypothesis I. The mean of the parents' and adolescents' perception of communication is greater for the total and open PACS T-scores in the PS group than in the AS group.

(a) The mean(s) of mother's perception of communication is greater for the total PACS in the PS group than in the AS group.

(b) The mean(s) of families' perception of communication is greater for the open PACS in the PS group than in the AS group.

Conclusion. The PS groups' perception of communication was significantly more positive than the AS group. Mothers in the PS group perceived their communication with their adolescent child more positively than in the AS group. PS families perceived their communication as more open than did AS families. The test results supported Hypothesis I.

Hypothesis II. Parents' perception of communication is more congruent with that of the adolescent child in the AS group than in the PS group according to the scores of the PACS.

(a) Mothers' perception of communication is more congruent with that of the adolescent child in the AS group than in the PS group.

(b) Fathers' perception of communication is more congruent with that of the adolescent child in the AS group than the PS group.

(c) Fathers' perception of communication and that of the adolescent child is more congruent than the perception of communication of the two other dyads (mother/father, mother/adolescent) in the AS group than in the PS group

(d) Fathers' perception of communication is greater than that of the adolescent child in the PS group than the AS group.

(e) Mothers' perception of communication is greater than fathers perception of communication in both groups.

Conclusion. AS family members were not significantly more congruent than the PS family members for any section of hypothesis II except section (d). Parent's perception of communication was not closer to their adolescent child's in the AS group than the PS group. The mother's and father's measures were not closer to their

adolescent child's in the AS group. Furthermore the father's and adolescent's perception of communication was not closer than the mother's and father's or the mother's and adolescent's perception in the AS group. Only section (d) of Hypothesis II was confirmed . Fathers' perception of communication was more positive than their adolescent child in the PS group by a greater amount than it was in the AS group. Mothers' perception of communication with their adolescent child was not more positive than the fathers' perception of communication with their adolescent child in either group.

Hypothesis III. A higher proportion of the families in the PS group function in the balanced level than families in the AS group as measured by FACES III

Conclusion. More PS families function in the balanced level than AS families. The results supported Hypothesis II. Cohesion and adaptability subscales were combined to establish the level of functioning. Cohesion subscale measures were higher for the adolescents, mothers, fathers, and families in the PS group than the AS group. Adaptability subscale scores were not significantly different between the two groups, they both were found to function in the balanced interval. PS families perceived more cohesion than the AS group. However the PS families members were not more or less adaptable than the AS group.

Hypothesis IV. Parents and their adolescent child in the PS group have a greater congruence between the perceived (real) and ideal functioning scores of the FACES III than do parents in the AS group.

Conclusion. There was a significant difference between the PS and AS groups when congruence between ideal and real functioning was examined. The results supported Hypothesis IV. PS adolescent reports showed more similarity between real and ideal cohesion and adaptability subscales measures than did AS adolescents. Comparable measures for the mothers showed a significant difference between the PS and AS group for the cohesion subscale but not the adaptability subscale. Fathers, like mothers, showed a significant difference between the PS and AS group for the cohesion

subscale but not the adaptability subscale. The difference in FACES III scores for ideal and perceived cohesion and adaptability for PS families was less than for the AS families. There was not a significant difference between the PS and AS mothers and fathers in terms of the difference between their perceived and ideal adaptability results.

Discussion

Adolescence is a critical stage both for the student and the family. An underlying assumption of the study is that PS families are more successful in supporting their adolescent during this period than are AS families. This research was designed to identify factors that support successful family functioning in families with adolescents. The study was framed in terms of the Circumplex Model and the instruments developed to measure its dimensions of communication, adaptability, and cohesion.

Communication

Olson et al.(1983) state "Communication among family members is of major interest and concern in families with adolescents. At this stage of the family life cycle one is likely to hear complaints about poor communication." The importance of communication is emphasized by Olson's description of it as the facilitating dimension. The more negative the communication the less effective it will be in facilitating the cohesion and adaptability, family functioning dimensions. The Parent Adolescent Communication Scale, PACS, was developed to measure perceptions of intrafamily and intergenerational communication. The PACS has two subscales, open assesses the degree of freedom with which information is exchanged between parents and children, problem measures difficulties or hinderences in the intergenerational exchange of information.

The statistical analyses of this study, as reported in Chapter IV were based on T scores. However differences between the two groups were apparent in the raw scores. Mean total PACS raw scores for adolescents, fathers and mothers in the PS group were higher than Olson et al's (1985) norms. For the AS group the opposite was true in that

the adolescents had lower mean scores and the parents had much lower mean scores than the norms (Appendix Table 7). AS parents acknowledge the communication problem with their child when questioned in a self report.

PACS clearly discriminates between the problem (AS) and nonproblem (PS) group. In this study both PS parents reported more positive perception of communication than did their children. The PS families' results support Barne's and Olson's (1982, 1985) findings of generational differences in perceptions of communication between parents and adolescents. Olson et al (1983) suggested that the independence needed by adolescents in order to separate from the family made it necessary to minimize aspects of family life such as positive communication in order to distance from dependency upon the parents.

This was not the case for the AS group where the mothers were slightly more positive but the fathers were substantially more negative.than their adolescents. The perception of communication of AS parents and adolescents was not more congruent than PS parents and adolescents. The PS group reported more positive communication and greater cohesion than the AS group There is a definite relationship between good communication and closer emotional bonding perceived in the PS families. AS parents were considerably more negative than PS parents thereby emphasizing the idea suggested in chapter 2 that a more toxic parent adolescent relationship might exist in AS families.

Family Functioning

Family functioning level, (balanced, mid-range, or extreme), is determined from a combination of the adaptability and cohesion subscales of FACES III. Olson et al (1983) says that families need a balance between too much change (chaotic) and too little change (rigid) for adaptability, and between too much emotional bonding (enmeshed) and too little (disengaged) for cohesion in order to function effectively at the adolescent family developmental stage. Both the PS and AS group adaptability scores had a distribution similar to Olson et al's (1985) norms (Appendix, Table 8). Smetts and Hartrup (1988)

discuss adaptability as relating to ability to solve problems, cope with change, and accomodate stress. The failure of the adaptability subscale to discriminate between the PS and AS groups may be because the skills associated with adaptability are present in both the PS and AS groups who have the level of achievement associated with being residents of a sophisticated, upwardly mobile, highly educated, suburban county.

School perormance, the work of the adolescent, is the criteria separating the PS and AS families. AS adolescents are experiencing difficulty with school performance and require an alternative school program with family therapy. Cohesion results provide a dramatic differentiation between PS and AS families. Although PS cohesion scores were very similar to Olson et al's norms a singular observation was that seventy five percent of the AS families reported themselves as functioning in the disengaged interval (Appendix Table 8). It is this extreme range for cohesion that distinguishes the AS and PS groups in the area of family functioning. Cohesion provides the glue that binds the family together so that they can support each other as they deal with their daily tasks. For AS families the glue lacks strength, it has been watered down so that there is not sufficient bonding. Minuchin (1974) discussed extreme forms of family functioning as enmeshed and disengaged and stated that "stresses in one family member do not cross over its inappropriately rigid boundaries. Only a high level of individual stress can reverberate strongly enough to activate the families supportive systems." Experience in an Alternative School setting supports this suggestion that the adolescent's family system does not provide adequate support. Primarily as a result of the cohesion subscale there was a significantly lower percentage of balanced families in the AS group (12.3%) than in the PS group (55.8%). This provides confirmation of the discriminating power of FACES III between problem and non problem families in accordance with Olson Sprenkleand Russell's formulation...The results of this study for hypothesis III are consistent with Olson's postulate 1 that balanced families (as represented by the PS families) will function more adequately in this developmental stage.

According to Olson et al (1983) families who function at the extremes are more likely to experience developmental problems. Other researchers have noted the importance of family functioning. Clarke (1984) in a study of families with schizophrenics, neurotics and families with therapy at some time in their past found more balanced families in a no-therapy control group than in the problem group. Kog et al (1985) in a study of family functioning for families with a member with eating disorders found that adaptability discriminated between the patient group and a nonpatient control group but cohesion did not. This is the reverse of the findings of this study,which might suggest that different groups do present different dimensional profiles.

The discovery that cohesion is the major discriminating factor for family functioning between successful and problem academic performance for adolescents is one of the most striking results of this research. The cohesion results are not inconsistent with the communication results discussed in the previous section. AS parents were considerably more negative about communication than were PS parents suggesting that a more conflicted parent adolescent relationship might exist in AS families. Minuchin (1974) notes that "a system toward the extreme disengaged end of the continuum tolerates a wide range of individual variations in its members." The disengaged level of family cohesion in the AS families provides greater independence for the adolescents in that group. While the degree of independence in the AS family is premature for the adolescent the resulting distance may allow the adolescent a less negative perception of communication resulting in their veiw of communication being less negative than that of their parent's veiw.

Discrepancy between ideal and real FACES III scores

The final topic of the study was the difference between what the families reported as their actual functioning and what they wished their level of functioning would be. Measurement of the level of family satisfaction as indicated by the degree of congruence between the real and ideal FACES III self reports showed less discrepancy for the PS

families than for the AS families. This finding for hypothesis IV is consistent with Olson's postulate IV that couples and families will function more adequately if there is a high level of congruence between the perceived and ideal.PS adolescents and families were more satisfied with their perception of both indicators of family functioning, adaptability and cohesion, than were AS adolescents and families. PS mothers and fathers were more satisfied with their perception of family cohesion than were AS mothers and fathers. The adolescents in the AS group wished for greater cohesion than they had. One interesting note was that more than sixty percent of PS families and eighty five percent of AS families wished for the extreme adaptability level that Olson calls chaotic.

Application of Results

There is often a lag between what clinicians intuitively believe to be important (and develop techniques to implement) and what has been substantiated by research. Satir (1967), Watzlawick (1978), and Haley (1963) emphasized communication change when working with a family in distress. Minuchin (1974) and Haley and Hoffman (1967) emphasized structural and strategic changes which would effect the adaptability dimension of family functioning. Minuchin also discussed problems with enmeshed or disengaged families at various stages of family development emphasizing the cohesion dimension. Cohesion has not received the attention due this important dimension. This researcher and clinician is unaware of therapists emphasizing change in this area as a major focus in asssessment or treatment. In 1980 Olson et al discussed some reasons which might preclude practicing therapists from using standardized diagnostic tools for their clinical assessment. They noted that: 1) therapists may not have clearly identified the dimensions they consider important for diagnostic assessment, 2) did not see the need for systematic diagnosis since it had little relationship to their therapeutic approach, and 3) felt that most available tools did not asses clinically relevant concepts and were not designed for use in clinical settings. The Circumplex Model of Olson, Russell and

Sprenkel (1979,1983) provides a conceptual framework to address the first point. His PACS and FACES III instruments address all of the dimensions of this model. With regard to his third point the results of this study support the use of these measures of communication and family functioning as diagnostic tools in the development of treatment plans.for families with adolescents where school performance is an issue and particularly emphasize the importance of cohesion.

At present direct treatment change in the cohesion dimension is not widely understood or identified as a specific treatment goal. A treatment plan for increased family cohesion would be appropriate for the disengaged families represented in the AS group. Clinicians working for family change should consider strengthening emotional bonding as part of the treatment plan in addition to the widely recognized need to improve communication. This study has shown that both communication and cohesion are important considerations for families with adolescents. The clinician might use the results of the scores as an assessment tool, in formulating a treatment plan, and in stating treatment goals.

Recommendations for further research

This study raises a number of questions for further research. Cohesion is the most elusive and least explored of the three dimensions presented by Olson. In working with over three hundred troubled families with adolescents in an alternative school the lack of cohesion has been painfully evident to this writer. In alternative school interviews, when adolescents are asked who they would go to with a problem, a friend is occasionally mentioned, but more often than not "no one." is the response. Minuchin (1974) noted that "Members of disengaged subsystems or families may function autonomously but have a skewed sense of independence and lack feelings of loyalty and belonging and the capacity for interdependence and for requesting support when needed." Research to determine what promotes emotional bonding, closeness, the nonverbal and otherwise communicated expression of being cared for and belonging to a family is

needed. The impact of warmth vs coldness or a lack of emotional bonding needs to be better identified and understood so that the results can be applied in therapeutic settings.

The PS group was significantly more positive about communication both parent to adolescent and adolescent to parent. As noted above Olson describes communication as a facilitating dimension for cohesion and adaptability. Research to provide understanding of what aspects of communication (a smile, hug, touch, protective or supportive statements, being there, or display of tenderness) between parent and adolescent help to improve cohesion is needed. This study used the PACS and FACES III self report measures and thus is based on the study population's perceptions. Rodick et al (1986) observed communication between mothers and adolescents as they jointly discussed and mutually rank ordered their response on a questionnaire. Communication was rated as positive or supportive "when an individual requested or gave information that aroused minimal defensiveness, confined communication to problem solving, demonstrated empathic understanding of the other's problems and feelings or demonstrated equality through mutual trust." Similar definitions or identified qualities need to be established for the cohesion and adaptability dimensions. Olson (1986) discusses the recent research that validates his model and uses the instruments he and others have developed to measure the three dimensions. The interdependence, dependence, and independence these dimensions have in relation to one another continue to need additional study along with knowledge about the instruments.

This research was conducted with predominantly white, college educated, upper- and middle-middle class, suburban, families with adolescents. Replication of this study for other sample populations would broaden the range with which these conclusions can be applied with full confidence. The study focused on student populations with very different levels of academic success. A similar study using a population where all students are at least nominally able to function in public schools and the discriminating variable is academic achievement would provide additional information about the

importance of cohesion for a general high school population. This study focused on families with adolescents, similar studies for other stages of family development are important. These results clearly establish that there is a difference between Public and Alternative School families in communication and family functioning. They do not show which is the chicken and which the egg. Questions as to whether (or how) school performance effects family functioning and vice versa need to be addressed. As a family therapist this researcher's bias is that problems in the family system lead to or get acted out in the adolescent's school performance. This is clearly a very sensitive issue, both the schools and the parents would prefer to believe that it was the child's problem, not their own. A longitudinal study in which a sample of families is assessed from preschool through college in terms of cohesion, communication and school performance is suggested. This would help to identify how communication and family functioning changes relate to school performance and vice versa. Different levels of cohesion and adaptability are appropriate at varying developmental stages. A clinical study to determine the impact of therapeutically introduced changes in family cohesion for students in alternative schools would help practicing therapists to evaluate the applicability of these results.

Conclusion

The results of this study expand the knowledge base about the level of family functioning and communication which exist in families with adolescents who are successful in the traditional classroom setting and those who are not. These findings support the PACS and FACES III as valid instruments which can aid the professional in identifying families where students are at risk for school failure. They demonstrate the importance of assessing family cohesion as a diagnostic component and suggest that clinicians should consider including improving family cohesion as well as communication as specific goals in treatment plans for students in alternative schools.

Appendix A Tables

Table 1

Means and Standard Deviation of PACS Open, Problem, and Total Raw Scores for Adolescents and Mothers with Variance Ratio Test of Mean Differences and Reliability Coefficients

Measure	Statistics	Group PS (n=49)	AS (n=37)	Both (n=86)	Test df	F
Adolescent regarding mother						
Open	Means	38.73	31.57	35.65	1	16.02*
	S.D.	7.62	8.96	8.92		
	rxx	.880	.839	.886		
Problem	Means	32.27	28.59	30.69	1	5.16*
	S.D.	8.38	5.90	7.60		
	rxx	.841	.525	.760		
Total	Means	71.00	60.16	66.34	1	12.48*
	S.D.	14.86	12.97	15.00		
	rxx	.914	.820	.892		
Mother regarding adolescent						
Open	Means	40.96	32.68	37.40	1	36.82*
	S.D.	5.04	7.61	7.47		
	rxx	.709	.839	.847		
Problem	Means	38.80	28.78	34.49	1	52.15*
	S.D.	6.66	5.94	8.06		
	rxx	.729	.587	.791		
Total	Means	79.76	61.46	71.88	1	57.92*
	S.D.	10.09	12.19	14.26		
	rxx	.799	.834	.887		

*Indicates significance at the .05 level.
df numerator = 1, denominator n.-2.
rxx Cronbach's Alpha, Reliability Coefficient

Table 2

Means and Standard Deviation of PACS Open, Problem, and Total Raw Scores for Adolescents and Fathers with Variance Ratio Test of Mean Differences and Reliability Coefficients

Measure	Statistics	Group PS	Group AS	Group Both	Test df	Test F
Adolescent regarding father						
	n=	44	28	72		
open	Means	35.34	29.57	33.10	1	6.87*
	S.D.	9.85	7.78	9.47		
	rxx	.930	.831	.910		
Problem	Means	31.55	29.00	30.56	1	2.21
	S.D.	7.82	5.69	7.14		
	rxx	.800	.593	.741		
Total	Means	66.89	58.57	63.65	1	5.48*
	S.D.	16.37	11.54	15.15		
	rxx	.923	.812	.900		
Father regarding adolescent						
	n=	42	26	68		
Open	Means	37.02	31.00	34.72	1	14.50*
	S.D.	6.15	6.63	6.95		
	rxx	.796	.777	.816		
Problem	Means	37.38	27.19	33.49	1	69.55*
	S.D.	4.92	4.86	6.96		
	rxx	.531	.466	.745		
Total	Means	74.40	58.19	68.21	1	44.69*
	S.D.	9.58	9.95	12.49		
	rxx	.784	.766	.858		

*Indicates significance at the .05 level.
df numerator = 1, denominator n.-2.
rxx Cronbach Alpha, Reliability Coefficient.

Table 3

PS and AS Total PACS Raw Scores with Norm Group Results

Measure	Statistics	Group PS	AS	Norm
Adolescent regarding mother				
	n=	49	37	417
	Means	71.00	60.16	66.56
	S.D.	9.85	7.78	9.47
Adolescent regarding father				
	n=	44	28	417
	Means	66.89	58.57	63.74
	S.D.	16.37	11.56	12.02
Mother regarding adolescent				
	n=	49	37	502
	Means	79.76	61.46	75.47
	S.D.	10.09	12.19	11.12
Father regarding adolescent				
	n=	42	26	496
	Means	74.40	58.19	72.55
	S.D.	9.58	9.95	10.74

Table 4

Percentage Distribution of Adolescents Interval Scores for FACES III with Test of Homogeneity of Distribution

Measure	Interval	Group PS (n=52)	AS (n=40)	Both (n=92)	Chi-Square df	Value
Real Cohesion						
	10.31	42.3%	80.0%	58.7%		
	32-37	25.0	10.0	18.5		
	38-43	21.2	5.0	14.1		
	44-50	11.5	5.0	8.7	3	13.51*
Real Adaptability						
	10-19	25.0	20.0	22.8		
	20-24	30.8	27.5	29.3		
	25-29	30.8	22.5	27.2		
	30-50	13.5	30.0	20.7	3	3.89
Ideal Cohesion						
	10-31	7.7	30.0	17.4		
	32-37	23.1	32.5	27.2		
	38-43	38.5	17.5	29.3		
	44-50	30.8	20.0	26.1	3	11.60*
Ideal Adaptability						
	10-19	3.8	2.5	3.3		
	20-24	7.7	0.0	4.3		
	25-29	9.6	12.5	10.9		
	30-50	78.8	85.0	81.5	3	3.48

*Indicates significance at the .05 level.

Table 5

Percentage Distribution of Mothers Interval Scores for FACES III with Test of Homogeneity of Distribution

Measure	Interval	Group PS (n=49)	AS (n=37)	Both (n=86)	Chi-Square df	Value
Real Cohesion						
	10-31	14.3%	59.5%	33.7%		
	32-37	24.5	18.9	22.1		
	38-43	42.9	21.6	33.7		
	44-50	18.4	0.0	10.5	3	22.67*
Real Adaptability						
	10-19	24.5	16.2	20.9		
	20-24	30.6	16.2	24.4		
	25-29	24.5	40.5	31.4		
	30-50	20.4	27.0	23.3	3	4.61
Ideal Cohesion						
	10-31	0.0	2.7	1.2		
	32-37	14.6	16.2	15.3		
	38-43	41.7	54.1	47.1		
	44-50	43.8	27.0	36.5	3	3.62
Ideal Adaptability						
	10-19	0.0	2.7	1.2		
	20-24	6.3	0.0	3.5		
	25-29	31.3	24.3	28.2		
	30-50	62.5	73.0	67.1	3	4.31

*Indicates significance at .05 level.

Table 6

Percentage Distribution of Fathers Interval Scores for FACES III with Test of Homogeneity of Distribution

Measure	Interval	Group PS (n=42)	AS (n=26)	Both (n=68)	Chi-Square df	Value
Real Cohesion						
	10-31	14.3%	65.4%	33.8%		
	32-37	33.3	26.9	30.9		
	38-43	31.0	7.7	22.1		
	44-50	21.4	0.0	13.2	3	22.12*
Real Adaptability						
	10-19	21.4	19.2	20.6		
	20-24	38.1	34.6	36.8		
	25-29	35.5	30.8	33.8		
	30-50	4.8	15.4	8.8	3	2.26
Ideal Cohesion						
	10-31	2.4	0.0	1.5		
	32-37	19.0	19.2	19.1		
	38-43	28.6	61.5	41.2		
	44-50	50.0	19.2	38.2	3	8.83*
Ideal Adaptability						
	10-19	2.4	0.0	1.5		
	20-24	7.1	0.0	4.4		
	25-29	42.9	42.3	42.6		
	30-50	47.6	57.7	51.5	3	2.79

*Indicates significance at the .05 level.

Table 7

Percentage Distribution of Families Interval Scores
for FACES III with Test of Homogeneity of Distribution

Measure	Interval	Group PS (n=52)	AS (n=40)	Both (n=92)	Chi-Square df	Value
Real Cohesion						
	10-31	19.2%	75.0%	43.5%		
	32-37	40.4	17.5	30.4		
	38-43	26.9	5.0	17.4		
	44-50	13.5	2.5	8.7	3	29.44*
Real Adaptability						
	10-19	11.5	10.0	10.9		
	20-24	48.1	27.5	39.1		
	25-29	30.8	35.0	32.6		
	30-50	9.6	27.5	17.4	3	6.78
Ideal Cohesion						
	10-31	0.0	10.0	4.3		
	32-37	13.5	35.0	22.8		
	38-43	55.8	40.0	48.9		
	44-50	30.8	15.0	23.9	3	13.30*
Ideal Adaptability						
	10-19	0.0	0.0	0.0		
	20-24	1.9	5.0	3.3		
	25-29	34.6	7.5	22.8		
	30-50	63.5	87.5	73.9	2	9.71*

*Indicates significance at the .05 level.

Table 8

Percentage Distribution of Families Interval Scores for FACES III with Norm Group Results

Measure	Interval	Group PS (n=52)	AS (n=40)	Norm (n=1315)
Real Cohesion				
	10-31	19.2%	75.0%	18.6%
	32-37	40.4	17.5	30.3
	38-43	26.9	5.0	36.4
	44-50	13.5	2.5	14.7
Real Adaptability				
	10-19	11.5	10.0	15.9
	20-24	48.1	27.5	37.3
	25-29	30.8	35.0	32.9
	30-50	9.6	27.5	13.9

Table 9

Within Groups Product-Moment Correlations of PACS Total T-Scores for Adolescents Regarding Mothers with FACES III Cohesion and Adaptability Subscale Scores

Measure	Measure		
	AM	C	A
AM (PACS Adolescent re mother)	1.000	.498*	.185
C (Cohesion)		1.000	.244*
A (Adaptability)	1.000		

* Indicates significance at the .05 level.

Table 10

PS, AS, and Within Groups Product-Moment Correlations of PACS Total T-Scores with FACES III Cohesion and Adaptability Subscale Scores for Mothers

Measure	Measure				
	MA			C	A
	W	PS	AS		
MA (PACS Mother re Adolescent)					
W (Within)	1.000			.353*	
PS		1.000			.495*
AS			1.000		.022
C (Cohesion)				1.000	.293*
A (Adaptability)	1.000				

Within group correlations shown except when PS and AS results differ significantly
* Indicates significance at the .05 level.

Table 11

Within Groups Product-Moment Correlations of PACS Total T-Scores for Adolescents Regarding Father with FACES III Cohesion and Adaptability Subscale Scores

Measure	Measure		
	AF	C	A
AM (PACS Adolescent re father)	1.000	.492*	.038
C (Cohesion)		1.000	.244*
A (Adaptability)	1.000		

* Indicates significance at the .05 level.

Table 12

Within Groups Product-Moment Correlations of PACS Total T-Scores with FACES III Cohesion and Adaptability Subscale Scores for Fathers

	Measure		
Measure	FA	C	A
FA (PACS Father re Adolescent)	1.000	.413*	.148
C (Cohesion)		1.000	.147
A (Adaptability)	1.000		

* Indicates significance at the .05 level.

Table 13

Within Groups Product-Moment Correlations of PACS Total T-Scores with FACES III Cohesion and Adaptability Subscale Scores for Families

	Measure		
Measure	FAM	C	A
FAM(PACS Families)	1.000	.475*	.157
C (Cohesion)		1.000	.173
A (Adaptability)			1.000

* Indicates significance at the .05 level.

Appendix B Bibliography

BIBLIOGRAPHY

Abrahams, G. (1983). Treating the family school interface: Multiple family group therapy with high risk children (Doctoral dissertation, University of Wisconsin, 1983). Dissertation Abstracts International, 44, 2711A.

Acock, A.C., & Bengtson, V.L. (1980). Socialization and attribution processes: Actual versus perceived similarity among parents and youth. Journal of Marriage and the Family, 44, 501-513.

Barnes, H.L., & Olson, D.H. (1982). Parent-adolescent communication scale. In D. Olson,.H. I. McCubbin, H. Barnes, A. Larsen, M. Muxen, & M. Wilson (Eds.), Families inventories. St. Paul MN:Family Social Science, University of Minnesota.

Barnes, H.L., & Olson, D.H. (1985). Parent-adolescent communication and the circumplex model. Child Development, 36, 438-447.

Beaver, W. R., & Voeller, M. N. (1983). Family models: Comparing and contrasting the Olson circumplex model with the Beavers systems model. Family Process, 22, 85-98.

Beckert, C. (1975). The effect of self-disclosure within a family on the perceived family environment and on individual personality traits (Doctoral dissertation, Brigham Young University, 1975). Dissertation Abstracts International, 35, 4714A.

Bell, D.C., & Bell, L. G. (1983). Parental validation and support in the development of adolescent daughters. In H.D. Grojevant & C.R. Cooper (Eds.), Adolescent development in the family: new directions for child development (22), San Francisco: Jossey Bass.

Bertalanffy, L. von. (1968). General systems theory and psychiatry. New York: Braziller.

Billings, A.G., & Moos, R.H. (1984). Treatment experiences of adults with unipolar depression: The influence of patient and life factors. Journal of Consulting and Clinical Psychology, 52, 119-131.

Brazelton, T.B. (1969). Infants and Mothers: Differences in Development. New York: Bell Publishing Co.

Burr, W.R. (1973). Theory construction and the sociology of the family. New York: Wiley & Sons

Carlson, G.A., & Cantwell, D.P. (1980). Unmasking masked depression in children and adolescents. American Journal Psychiatry, 137(4), 445-451.

Carpenter, P. J. (1984). The use of intergenerational family ratings: Methodological and interpretive considerations. Journal of Clinical Psychology, 40, 505-512.

Clarke, J. (1984) The family types of schizophrenics, neurotics, and "normals." Unpublished doctoral dissertation,Family Social Science,University of Minnesota.

Crook, T., Raskin, A., & Eliot, J. (1981). Parent-child relationships and adult depression. Child Development, 52(3), 951-957.

Dancy, B., & Handal, P. (1980). Perceived family climate of black adolescents: A function of parental marital status on perceived conflict. Journal of Community Psychology, 8, 208- 214.

Druckman, Joan A. (1979). A family oriented policy and treatment program for juvenile status offenders. Journal of Marriage and the Family, 41, 627-636.

Enright, A.D., Lapsley, D.K., Drivas, E., & Fehr, L.A. (1980). Parental influences on the development of adolescent autonomy and identity. Journal of Youth and Adolescence, 9(6), 529-545.

Feldman, S. S., & Gehring, T. M. (1988). Changing perception of family cohesion and power across adolescence. Child Development. 59(4), 1034-45.

Finney, J. W., Moos, R.H., Cronkite, R.C., & Gamble, W. (1983). A conceptual model of the functioning of married persons with impaired partners: Spouses of alcoholic patients. Journal of Marriage and the Family, 43, 23-33.

Fisher, B., Berdie, J., Cook, T., & Day, N. (1980). Adolescent abuse and neglect: Intervention strategies, U.S. Department of Health and Human Service Publication No. (OHDS) 80- 30266, Washington, D.C.: U. S. Government Printing Office.

Fitch, G. (1970). Effects of self esteem, perceived performance and choice on causal attributions. Journal of Personality and Social Psychology, 16(2), 311-315.

Forman, S.G., & Forman, B.D. (1981). Family environment and its relation to adolescent personality factors. Journal of Personality Assessment, 45, 163-167.

Forsyth, D.R., & McMillan, J. H. (1982). The attribution cube and reactions to educational outcomes. Journal of Educational Psychology, 74, 632-641.

Fritz, G.K., & Conti, P. A. (1982). The child psychiatrist and therapy in the public school system. Journal of Psychiatric Treatment and Evaluation, 4, 17-23.

Fuhr, R. A., Moos, R. H., & Ditshotsky, N. (1981). The use of family assessment and feedback in on going therapy. America, 9, 24-36.

Ganong, L. H., & Coleman, M. (1984). The effect of remarriage on children: A review of the empirical literature. Family Relations, 33, 389-406.

Garbarino, J., Sebes, J., & Schellenbach, C. (1984). Families at risk for destructive parent child relations in adolescence. Child Development, 55, 174-183.

Goffman, E. (1959). The presentation of self in everyday life. Garden city: Doubleday.

Goldstein, H. S. (1984). Parental composition, supervision, and conduct problems in youths 12 to 17 years old. Journal of the American Academy of Child Psychiatry, 23(6), 679- 684.

Golombok, S., Spencer, A., & Rutter, M. (1983). Children in lesbian and single-parent households: Psychosexual and psychiatric appraisal. Journal Child-Psychology Psychiatry, 24(4), 551-572.

Haley, J. (1963). Strategies of psychotherapy. New York: Grune & Stratton.

Haley, J. & Hoffman, L. (1967). Techniques of family therapy. New York: Basic Books.

Hall, J. A. (1987) Parent-adolescent conflict: An empirical review. Adolescence, XXII(88), 767-789.

Havingjurst, R. J. (1948). Developmental tasks and education. Chicago: University of Chicago Press.

Hill, R., & Hansen, D.A. (1960). The identification of conceptual frameworks utilized in family study. Marriage and Family Living, 42, 299-309.

Hill, R., and Rodger, R. (1964). The developmental approach, in H.T. Christensan (ed.). Handbook of Marriage and the Family. Chicago: Rand McNally.

Hill, R. (1981). Status of research on families. Research on Children and Adolescents in the Family Context, Department of Health and Human Services Publication No. (OHDS) 81- 30323, Washington, D.C.: U.S. Government Printing Office.

Himes-Chapman, B., & Hansen, J. C. (1983). Family environments and self concepts of delinquents and mentally ill adolescents. Family Therapy, 10, 289-298.

Hollingshead, A. B.,& Redlich, F. (1958).Social class and mental illness. New York: John Wiley & Sons.

Kelley, H.H. (1967). Attribution theory in social psychology. In D. Levine (Ed.) Nebraska Symposium on Evaluation. Lincoln: University of Nebraska.

Kelsey-Smith, M., & Beavers, W.R. (1967). Family assessment: Centripetal and centrifugal family systems. American Journal of Family Therapy, 9, 3-12.

Killorin, E., & Olson, D.H. (1984). THe chaotic flippers in treatment. In E. Kaufman (Ed.), Power to change: Alcoholism. New York: Gardner Press.

Kog,E.,Vertommen,H., & Degroote, T.(1985). Family Interaction research in anorexia nervosa: The use and misuse of a self-report questionnaire. International Journal of Family Psychiatry, 6, 227-243

Lewis, J.M., Beavers, W.R., Gossett, J. T., & Phillips, V.A. (1976). No Single Thread. New York: Brunner/Mazel.

Malin, N. (1979). Pathways to child placement: Parental perceptions of adolescent children in residential treatments (Doctoral dissertation, University of California at Los Angeles, 1978). Dissertation Abstracts International, 39, 6360A.

Minuchin, S. (1974). Families & family therapy. Cambridge, Massachussetts: Harvard University Press.

Moos, R. H. (1974). Family environment scale. Palo Alto: Consulting Psychologists Press.

Moos, R. H. (1979). Evaluating educational environments. San Francisco: Jossey-Bass.

Moos, R.H., Clayton, J., & Max, W. (1979). The social climate scales: An annotated bibliography. Palo Alto: Consulting Psychologist Press.

Moos, R.H., & Moos, B.S. (1976). A typology of family social environments. Family Process, 15, 357-371.

Needle, R., McCubbin, H., Lorence, J., & Hockhauser, M. (1983). Reliability and the validity of adolescent self-reported drug use in a family based study: A methodological report. The International Journal of the Addictions, 18(7), 901-912.

Olson, D.H. (1986). Circumplex model VII:Validation studies and FACES III. Family Process, 25, 337-351.

Olson, D.H., McCubbin, H.I., Barnes, H.L., Larsen, A.S., Muxen, M.J., & Wilson, M.A. (1983). Families: What makes them work . Beverly Hills: Sage Publications.

Olson, D.H., McCubbin, H.I., Barnes, H.L., Larsen, A.S., Muxen, M.J., & Wilson, M.A. (1982). Family Inventories, St. Paul: University of Minnesota.

Olson, D.H., McCubbin, H.I., Barnes, H.L., Larsen, A.S., Muxen, M.J., & Wilson, M.A. (1985). Family Inventories, St. Paul: University of Minnesota, Revised Edition.

Olson, D.H., Russell, C.S. & Sprenkle, D.H. (1979). Circumplex model of marital and family systems I: Cohesion and adaptability dimensions, family types, and clinical applications. Family Process, 18, 3-27.

Olson, D.H., Russell, C.S., & Sprenkle, D.H. (1980). Marital and family therapy: A decade review. In F. M. Berardo. Decade review: Family research 1970-1979. Minneapolis, Minnesota: National Council on Family Relations.

Olson, D.H., Russell, C.S., & Sprenkle, D.H. (1983). Circumplex model VI: Theoretical update. Family Process, 22, 69-83.

Parish, T. S. (1981). Young adults evaluation of themselves and their parents as a function of family structure and disposition. Journal of Youth and Adolescence, 10(2), 173-178.

Parish, T.S., & Dostal, J.W. (1980). Evaluation of self and parent figures by children from intact, divorced and reconstituted families. Journal of Youth and Adolescence, 9(4), 347-351.

Parsons, T. (1949). The social structure of the family. In R.N. Anshen (Ed), The Family: Its function and destiny. New York: Harper and Brothers.

Parsons, T. & Bales, R. F. (1955). Family socialization and interaction process. Glencoe: Free Press.

Pino, Christopher. (1984,). The children's environment scale (CFES). Family Therapy, 11, 85-86.

Prasinos, S., & Tittler, B. (1981). The family relationships of humor-oriented adolescents. Journal of Personality, 49, 295-305.

Rinehart, G. (1977). One parent families: A study of divorced mothers and adolescents using social climate and relationship style (Doctoral dissertation, California School of Professional Psychology, 1977). Dissertation Abstracts International, 38, 2881B.

Rodick P., Henggler, S.W., & Hansen, G. (1986). An evaluation of family adaptability and cohesion scales (FACES) and the circumplex model. Journal of Abnormal Child Psychology, 14, 77-87.

Rosenthal, D. & Hansen, J. (1980). Comparison of adolescents' perceptions and behaviors in single and two-parent families. Journal of Youth and Adolescence, 9(5), 407-417.

Russell, C. S. (1979). Circumplex model of marital and family systems III: Empirical evaluation with families. Family Process, 18, 29-45.

Russell, C. S. (1980). A methodological study of family cohesion and adaptability. Journal of Marital and Family Therapy, 6, 459-470.

Rutter, M. (1978). Maternal deprivation 1972-1978: New findings, new concepts, new approaches. Child Development, 49 283-303.

Satir, V. (1967). Conjoint family therapy. Palo Alto, California: Science and Behavior Books.

Satir, V. (1972). Peoplemaking. Palo Alto, California: Science and Behavior Books.

Seligman, Martin, E.P. (1975). Helplessness. San Francisco: W.H. Freeman and Company.

Smets, A C. &Hartup, W W. (1988). Systems and symptoms: Family cohesion/adaptability and childhood behavior problems. Journal Abnormal Child Psychology, 16(2), 233-46.

Spiegel, J., & Bell, N. (1959). The family of the psychiatric patient. In S. Arieti (Ed.), Handbook of american psychiatry, Volume I, New York: W.W. North & Company.

Steinberg, L. D. (1981). Transformation in family relations at puberty. Developmental Psychology, 17(6), 833-840.

Stern, E. E. (1980). Single mothers' perception of father role and the effects of father absence on boys. Journal of Divorce, 4(2), 77-86.

Stern, M., Northman, J.E., & Van Slyck, M.R. (1984). Father absence and adolescent "problem behaviors": Alcohol consumption, drug use and sexual activity. Adolescence, XIX(74), 301- 312.

Stryker, Sheldon. (1972). Symbolic interaction theory: A review and suggestions for comparative family research. Journal of Comparative Family Studies, 3, 17-32.

Tolan, P. (1988). Socioeconomic, family, and social stress correlates of adolescent antisocial and delinquent behavior. Journal Abnormal Child Psychology, 16(3), 317-31.

Turner, R. H. (1970). Family Interaction. New York: Wiley.& Sons.

Watzlawick, P. (1978). The Language of Change. New York: Basic Books.

Weiss, A. (1984). Parent-child relationships of adopted adolescents in psychiatric hospitals. Adolescence, XIX(73), 77-78.

Appendix C Forms

INFORMATION SHEET

Students Name:_____Sex: M __ F _____

School:_____G.P.A._____Grade:_____

1985-86 Absences - No.:_____ Tardies_____

Repeated Grade - No____ Yes____When_____

Check One Group - Ethnicity: Black American_____White American_____

Hispanic_____ Other (Specify)_____

Address:_____

_____

Fathers Name:_____

Age:__Occupation_____Education Level:_____

Salary Range:_____

Mothers Name:_____

Age:__Occupation_____Education Level:_____

Salary Range:_____

Siblings:

Brother(s) Name:_____

Occupation or School_____

Name:_____

Occupation or School_____

Sister(s) Name:_____

Occupation or School_____

Marital Status of Parents: Married_____Divorced_____Single_____

Deceased_____Divorced/Deceased/Remarried_____

Presently in Therapy - Now or in the past three years:

Check Where Appropriate: Family_____Individual____Group Marital_____

Substance Abuse Program: Yes___No___When_____

CONSENT FORM

University of Maryland
College Park, Maryland

Description

Subject's Name:_____
(Please Type or Print)

Parent Adolescent Communication: When Does It Work?

Venus S. Masselam - Principal Investigation

The purpose of this study is to understand the differences in parent and adolescent perceptions of communication and functioning between adolescents enrolled in public schools and those enrolled in alternative school programs.

The Bases of the Analysis

This assessment will be based upon the information from two self report questionnaires which are to be completed individually by parent(s) and his/her/their adolescent child. Once the two questionnaires: (1) The Family Adaptability Cohesion Evaluation Scale III (FACES), and (2) Parent Acolescent Communication Scale (PACS) are completed they are to be returned to the agency representative or the principal investigator.

There are no expected risks related to the completion of these forms which will require no more than one hour of your time. The completion of these questionnaires will provice a vehicle for discussion for all family members and may be used for educational work with the families within cooperating agencies. Every precaution will be taken to insure you and your families privacy. There is no need for the disclosure of the participants identity at any time in order to complete this study.

If you have any questions, please refer them to your agencies representative or Ms. Venus S. Masselam at (703) 442-9528 days, or (301) 650-6570 in the evening.

The parents and acolescents are at liberty to withdraw from the study at any given time. It is the responsibility of the cooperating agency to explain the purpose of using the results of the completed questionnaire with the families.

BEST COPY AVAILABLE

Therefore:

I fully understand the program or activity in which I am being asked to participate and the procedure which will be performed. I understand that I may ask questions any time while the study is in progress.

I understand that I am participating in this activity of my own free will and that I am free to withdraw my consent and discontinue my participation at any time while this study is in progress. I understand that my child's participation in this activity is of his/her own free will.

Mother's signature_____

Father's signature_____

Adolescent's signature_____

PARENT-ADOLESCENT COMMUNICATION

Parent Form

Howard L. Barnes & David H. Olson

RESPONSE CHOICES				
1 Strongly Disagree	2 Moderately Disagree	3 Neither Agree Nor Disagree	4 Moderately Agree	5 Strongly Agree

___ 1. I can discuss my beliefs with my child without feeling restrained or embarrassed.

___ 2. Sometimes I have trouble believing everything my child tells me.

___ 3. My child is always a good listener.

___ 4. I am sometimes afraid to ask my child for what I want.

___ 5. My child has a tendency to say things to me which would be better left unsaid.

___ 6. My child can tell how I'm feeling without asking.

___ 7. I am very satisfied with how my child and I talk together.

___ 8. If I were in trouble, I could tell my child.

___ 9. I openly show affection to my child.

___ 10. When we are having a problem, I often give my child the silent treatment.

___ 11. I am careful about what I say to my child.

___ 12. When talking with my child, I have a tendency to say things that would be better left unsaid.

___ 13. When I ask questions, I get honest answers from my child.

___ 14. My child tries to understand my point of view.

___ 15. There are topics I avoid discussing with my child.

___ 16. I find it easy to discuss problems with my child.

___ 17. It is very easy for me to express all my true feelings to my child.

___ 18. My child nags/bothers me.

___ 19. My child insults me when s/he is angry with me.

___ 20. I don't think I can tell my child how I really feel about some things.

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PARENT-ADOLESCENT COMMUNICATION

Adolescent Form

Howard L. Barnes & David H. Olson

RESPONSE CHOICES

1	2	3	4	5
Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree

Mother	Father	
1. __	21. __	I can discuss my beliefs with my mother/father without feeling restrained or embarrassed.
2. __	22. __	Sometimes I have trouble believing everything my mother/father tells me.
3. __	23. __	My mother/father is always a good listener.
4. __	24. __	I am sometimes afraid to ask my mother/father for what I want.
5. __	25. __	My mother/father has a tendency to say things to me which would be better left unsaid.
6. __	26. __	My mother/father can tell how I'm feeling without asking.
7. __	27. __	I am very satisfied with how my mother/father and I talk together.
8. __	28. __	If I were in trouble, I could tell my mother/father.
9. __	29. __	I openly show affection to my mother/father.
10. __	30. __	When we are having a problem, I often give my mother/father the silent treatment.
11. __	31. __	I am careful about what I say to my mother/father.
12. __	32. __	When talking to my mother/father, I have a tendency to say things that would be better left unsaid.
13. __	33. __	When I ask questions, I get honest answers from my mother/father.
14. __	34. __	My mother/father tries to understand my point of view.
15. __	35. __	There are topics I avoid discussing with my mother/father.
16. __	36. __	I find it easy to discuss problems with my mother/father.
17. __	37. __	It is very easy for me to express all my true feelings to my mother/father.
18. __	38. __	My mother/father nags/bothers me.
19. __	39. __	My mother/father insults me when s/he is angry with me.
20. __	40. __	I don't think I can tell my mother/father how I really feel about some things.

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FACES III

David H. Olson, Joyce Portner, and Yoav Lavee

1	2	3	4	5
ALMOST NEVER	ONCE IN AWHILE	SOMETIMES	FREQUENTLY	ALMOST ALWAYS

DESCRIBE YOUR FAMILY NOW:

____ 1. Family members ask each other for help.

____ 2. In solving problems, the children's suggestions are followed.

____ 3. We approve of each other's friends.

____ 4. Children have a say in their discipline.

____ 5. We like to do things with just our immediate family.

____ 6. Different persons act as leaders in our family.

____ 7. Family members feel closer to other family members than to people outside the family.

____ 8. Our family changes its way of handling tasks.

____ 9. Family members like to spend free time with each other.

____ 10. Parent(s) and children discuss punishment together.

____ 11. Family members feel very close to each other.

____ 12. The children make the decisions in our family.

____ 13. When our family gets together for activities, everybody is present.

____ 14. Rules change in our family.

____ 15. We can easily think of things to do together as a family.

____ 16. We shift household responsibilities from person to person.

____ 17. Family members consult other family members on their decisions.

____ 18. It is hard to identify the leader(s) in our family.

____ 19. Family togetherness is very important.

____ 20. It is hard to tell who does which household chores.

FAMILY SOCIAL SCIENCE, 290 McNeal Hall, University of Minnesota, St. Paul, MN 55108

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FACES III: Ideal Version

David H. Olson, Joyce Portner, and Yoav Lavee

1 ALMOST NEVER	2 ONCE IN AWHILE	3 SOMETIMES	4 FREQUENTLY	5 ALMOST ALWAYS

IDEALLY, how would you like YOUR FAMILY TO BE:

_____ 21. Family members would ask each other for help.

_____ 22. In solving problems, the children's suggestions would be followed.

_____ 23. We would approve of each other's friends.

_____ 24. The children would have a say in their discipline.

_____ 25. We would like to do things with just our immediate family.

_____ 26. Different persons would act as leaders in our family.

_____ 27. Family members would feel closer to each other than to people outside the family.

_____ 28. Our family would change its way of handling tasks.

_____ 29. Family members would like to spend free time with each other.

_____ 30. Parent(s) and children would discuss punishment together.

_____ 31. Family members would feel very close to each other.

_____ 32. Children would make the decisions in our family.

_____ 33. When our family got together, everybody would be present.

_____ 34. Rules would change in our family.

_____ 35. We could easily think of things to do together as a family.

_____ 36. We would shift household responsibilities from person to person.

_____ 37. Family members would consult each other on their decisions.

_____ 38. We would know who the leader(s) was in our family.

_____ 39. Family togetherness would be very important.

_____ 40. We could tell who does which household chores.

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